



City of Columbia Police & Fire Pension

Presented on September 13th, 2024



Princeton Investment Consulting

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Preparing for cuts

House View presentation

September 2024

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Rotation: Market breadth improved as laggards performed better

Higher expectations of rate cuts under a benign macro environment has helped US equities broaden its rally, precipitating a sharp rotation to end the summer, but equities are still historically concentrated

S&P 500 Advancers – Decliners

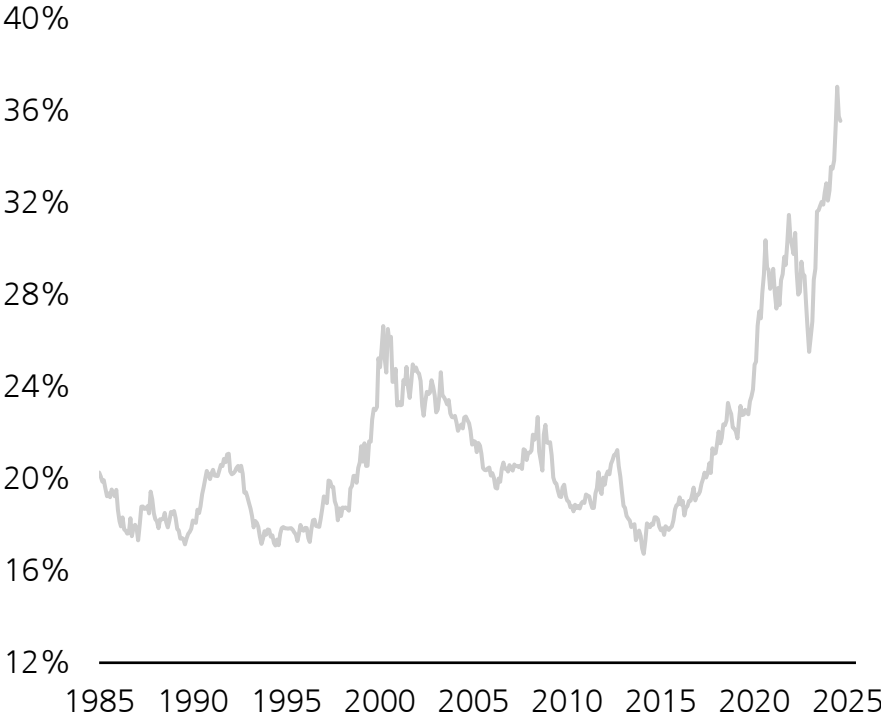
Quarterly moving average, count of stocks



Source: Bloomberg, Macrobond, UBS, as of 2 September 2024

Equity market concentration remains the highest in decades

Top 10 S&P 500 constituents as a % of S&P 500 market value



Source: Factset, UBS, as of 31 August 2024

Market review: A rotation, a correction, and lots of volatility

The strong 1H24 outperformance of large-cap tech gave way to a performance rotation favoring the market laggards in July, followed by a sharp pullback and then recovery in August.

- **What the markets are pricing:** Markets have returned to pricing a good outcome for the economy and AI spending. After a growth scare and fears of a policy error. The S&P 500 is back near all-time highs, while treasury rates remain near year-to-date lows as rate cuts appear imminent.
- **July saw a (brief) rotation in equities.** Good macro data, concentrated positioning in tech stocks, and higher expectations for Fed rate cuts sparked a rotation trade in July, with small caps returning over 10% as large-cap growth equities lagged.
- **August began with a "risk-off" trade.** The July labor report fueled recession fears, causing a flight to safety that supported quality bonds and a pullback in equities. Unwinding of positions has likely amplified the moves.
- **Investors concerns were assuaged with encouraging economic data.** Solid retail sales, a benign inflation report, and relatively low initial jobless claims have all led to a rapid rebound in US equities as investor hopes are renewed for the Fed to navigate to a soft landing.
- **Momentum:** The momentum factor has been a strong tailwind to US equity strength this year, and following the sharp pullback, looks set to continue driving returns through the end of the year.

US large-cap equities standout in 1H, underwhelming since

Asset class total returns

	1 week	1 month	3 month	6 month	12 month
Cash	0.1%	0.5%	1.4%	2.7%	5.5%
US government	-0.2%	2.5%	5.3%	4.9%	7.2%
US TIPS	0.3%	2.1%	4.4%	5.0%	7.2%
US municipals	0.1%	0.9%	2.9%	1.8%	6.5%
US IG credit	-0.1%	2.8%	5.5%	5.7%	10.3%
US high yield	0.4%	1.8%	4.5%	6.0%	13.2%
Int'l dev FI	0.2%	4.3%	5.8%	5.1%	7.8%
EM USD FI	0.2%	2.8%	4.9%	6.8%	13.1%
EM LC FI	0.1%	3.2%	4.1%	4.2%	8.2%
Global Equity	0.0%	3.1%	4.8%	10.2%	24.4%
US All-cap	-0.4%	2.1%	5.6%	10.3%	27.1%
US large-cap	-0.5%	2.4%	5.6%	10.4%	27.5%
US large-cap growth	-1.8%	2.7%	4.5%	10.5%	33.2%
US large-cap value	1.0%	2.1%	6.4%	9.8%	20.5%
US mid-cap	0.4%	1.8%	5.1%	7.3%	20.8%
US small-cap	0.9%	-3.0%	6.3%	8.1%	18.9%
Int'l dev equity	1.5%	4.9%	3.9%	9.2%	20.9%
EM equity	-0.3%	2.6%	1.9%	9.6%	15.0%
Preferreds	0.5%	2.8%	4.6%	4.6%	14.5%
US Real Estate	2.2%	6.1%	17.9%	15.2%	22.2%
Senior loans	0.3%	0.6%	1.7%	3.9%	9.9%
Broad Commodities	0.4%	0.8%	-8.5%	2.3%	-3.8%
Brent Crude	3.4%	-2.0%	-5.2%	-0.5%	-1.3%
Gold	-0.3%	4.9%	6.1%	23.1%	30.4%
Broad Industrial Metals	0.3%	5.6%	-11.7%	9.4%	9.0%

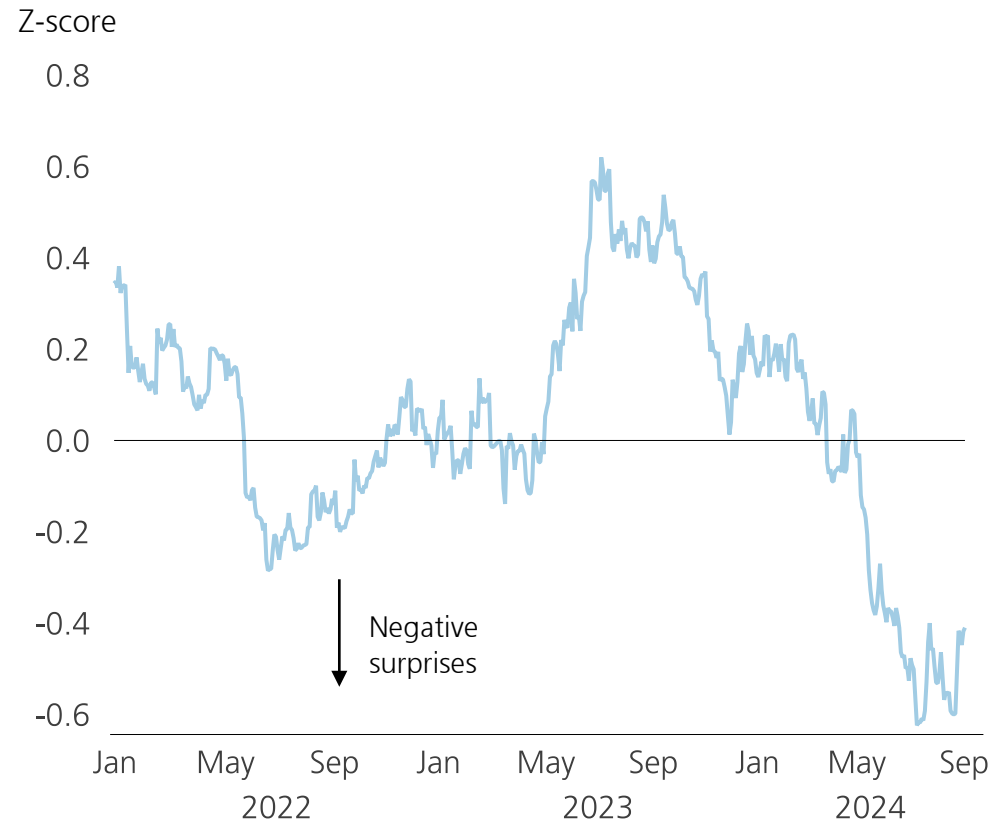
Source: Bloomberg, UBS, as of 28 August 2024

Macro recap: The economy is still on a soft landing trajectory

Economic data has mostly surprised to the downside as high interest rates weigh on activity, but consumer spending continues to increase at a robust pace.

- **US Macro data has been surprisingly soft.** Data has surprised mostly to the downside, but strong retail sales are supporting the recovery. Disinflation has resumed.
 - **Labor market continues to cool.** The extreme tightness following the pandemic has eased and labor market conditions are now slightly softer than pre-pandemic levels.
 - **Spending holding up.** Retail sales data for June and July surprised to the upside, although lower-income households are struggling to afford basics such as food and rent.
 - **Inflation data was the bright spot.** Inflation data over the past three months shows disinflation in services and goods prices falling outright.
 - **Housing market shows broad weakness.** High mortgage rates continue to weigh on housing activity.
 - **Soft data shows “vibecession.”** Fed Activity surveys and consumer sentiment data continue to be at low levels, especially for future expectations.

Bloomberg Economic Surprise Index appears to be bottoming



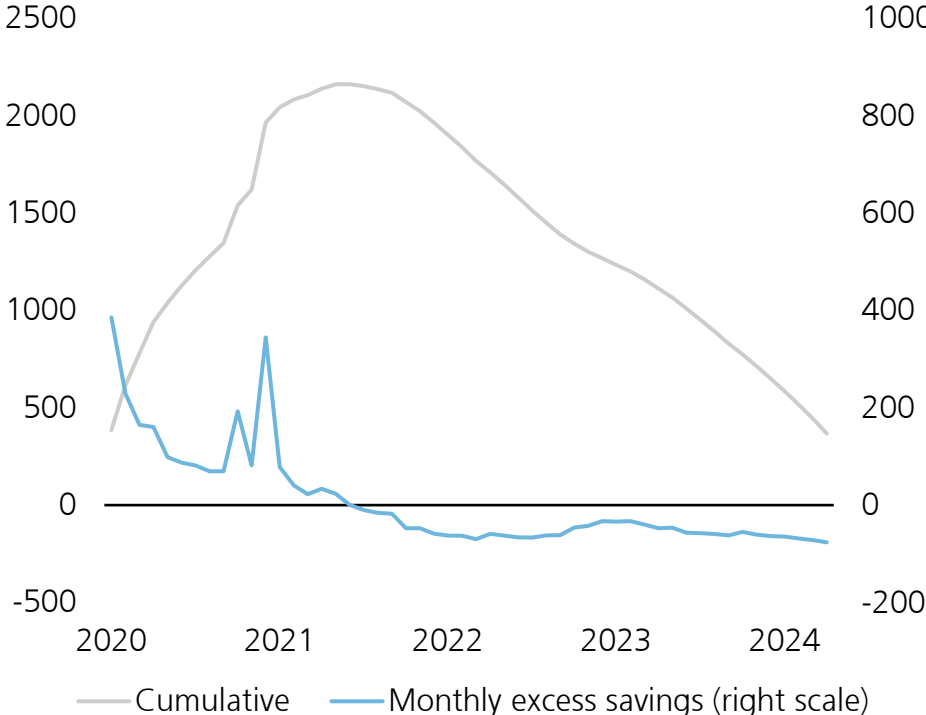
Source: Bloomberg, Macrobond, UBS, as of 2 September 2024

Growth: Consumption growth likely to continue moderating

Households have used up most of the excess savings built during the pandemic and the savings rate may begin to increase. Rising real disposable income should provide a base of support.

Households have used up most of their excess savings

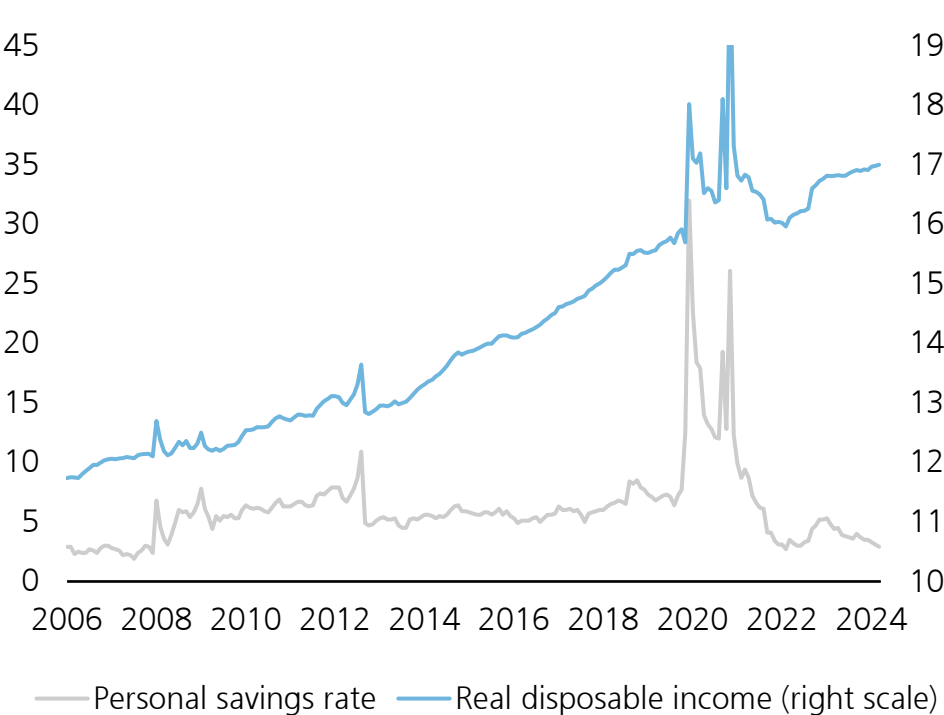
Excess savings, monthly and cumulative, in USD bn



Source: Bloomberg, UBS, as of 30 August 2024
Note: Excess savings based on UBS estimates

Real income is rising, but savings rate may start increasing

Personal savings rate in %, real disposable income in USD tr



Source: Bloomberg, UBS, as of 30 August 2024

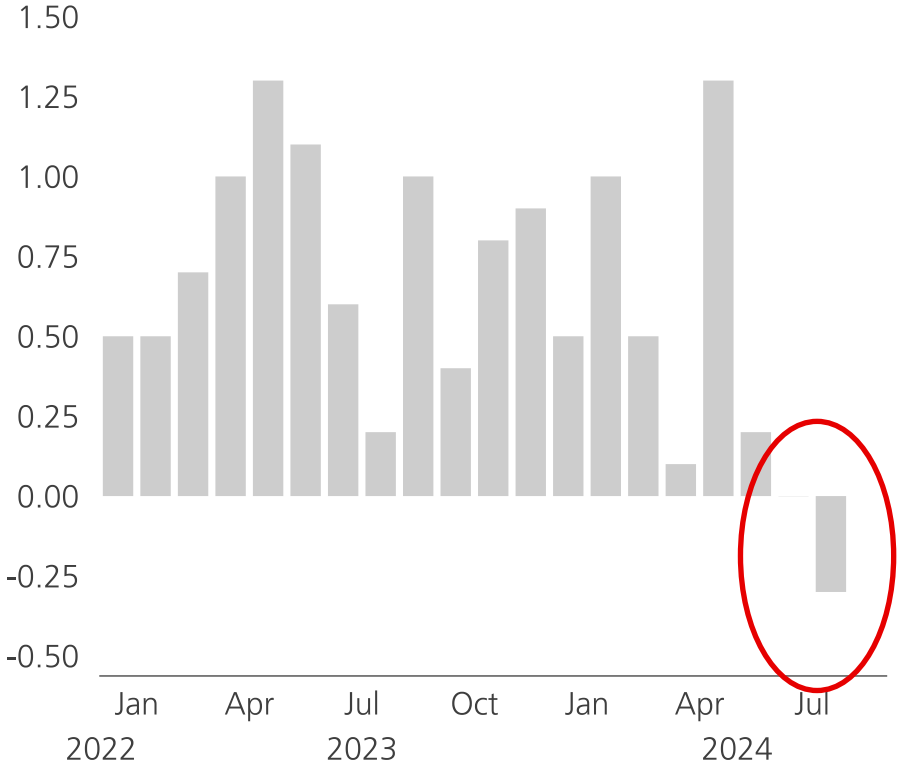


Growth: High borrowing costs weighing on investment

High borrowing costs are weighing on investment, but AI is providing a tailwind. Fiscal policy is supporting investment through the Inflation Reduction Act, CHIPS Act, and infrastructure spending.

Construction spending has slowed

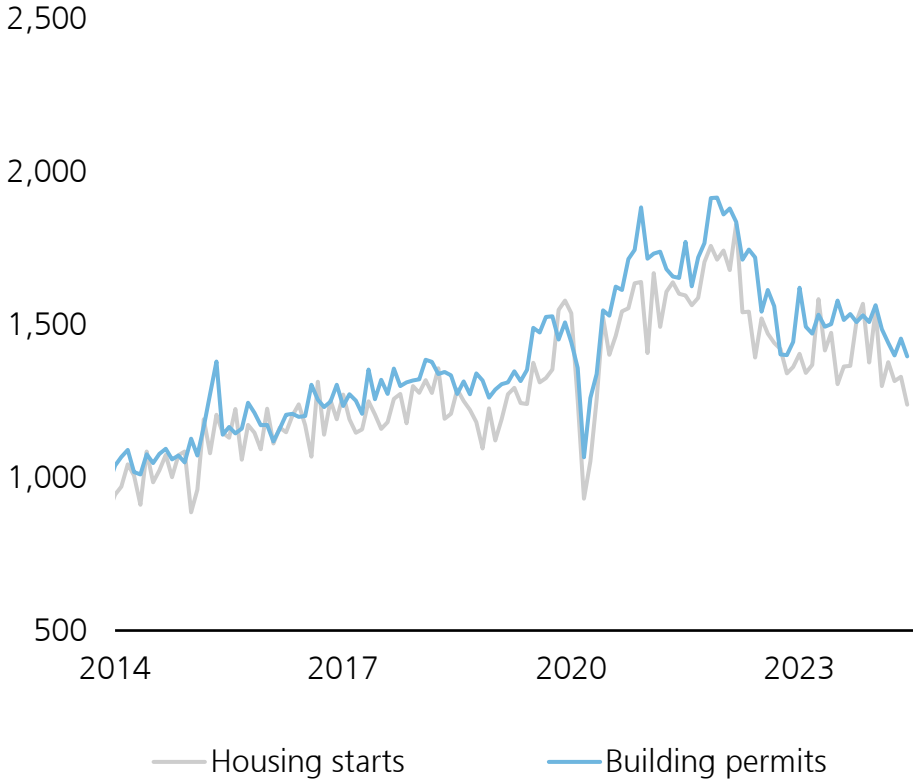
m/m, SAAR, %



Source: Bloomberg, Macrobond, UBS, as of 2 September 2024

High interest rates are weighing on housing

Housing starts and building permits, annualized rate in thousands



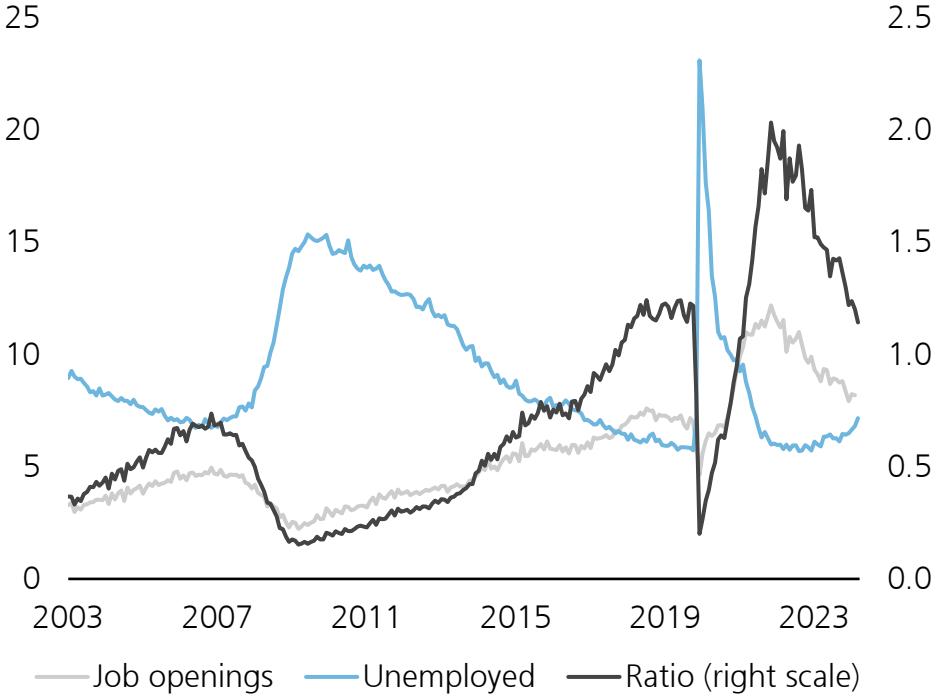
Source: Bloomberg, UBS, as of 28 August 2024

Labor: The labor market is strong but no longer overheated

Labor market tightness peaked two years ago and has been getting back into balance since then. Fed Chair Powell said he does not want to see further softening.

Better balance between job openings and unemployed

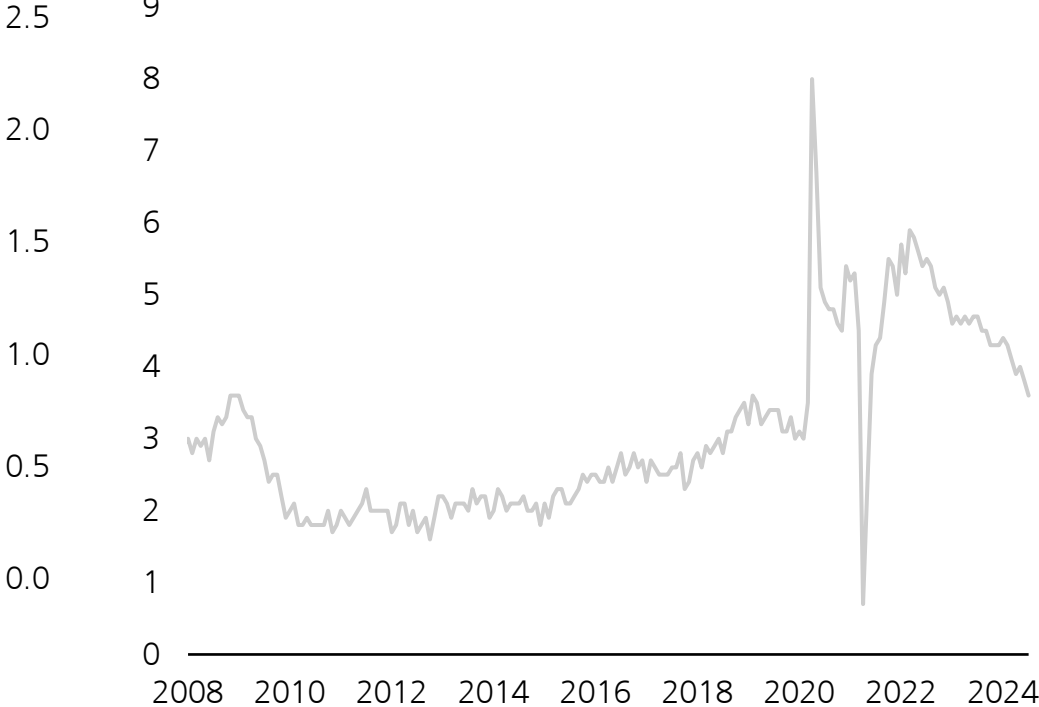
In millions



Source: Bloomberg, UBS, as of 28 August 2024

Wage growth has moderated as labor shortages ease

Average hourly earnings, y/y change in %



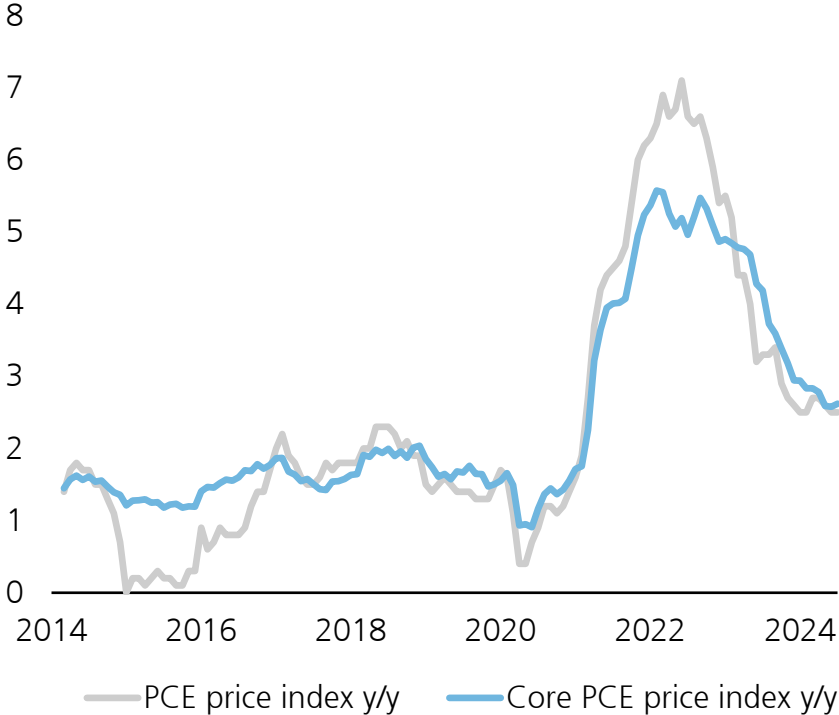
Source: Bloomberg, UBS, as of 28 August 2024

Inflation: Inflationary pressure has eased

Monthly inflation data showed acceleration in Q124, but the more recent data shows broad disinflation, with previously sticky services slowing. Shelter remains the biggest driver of overall inflation.

PCE inflation is near the Fed's 2% target

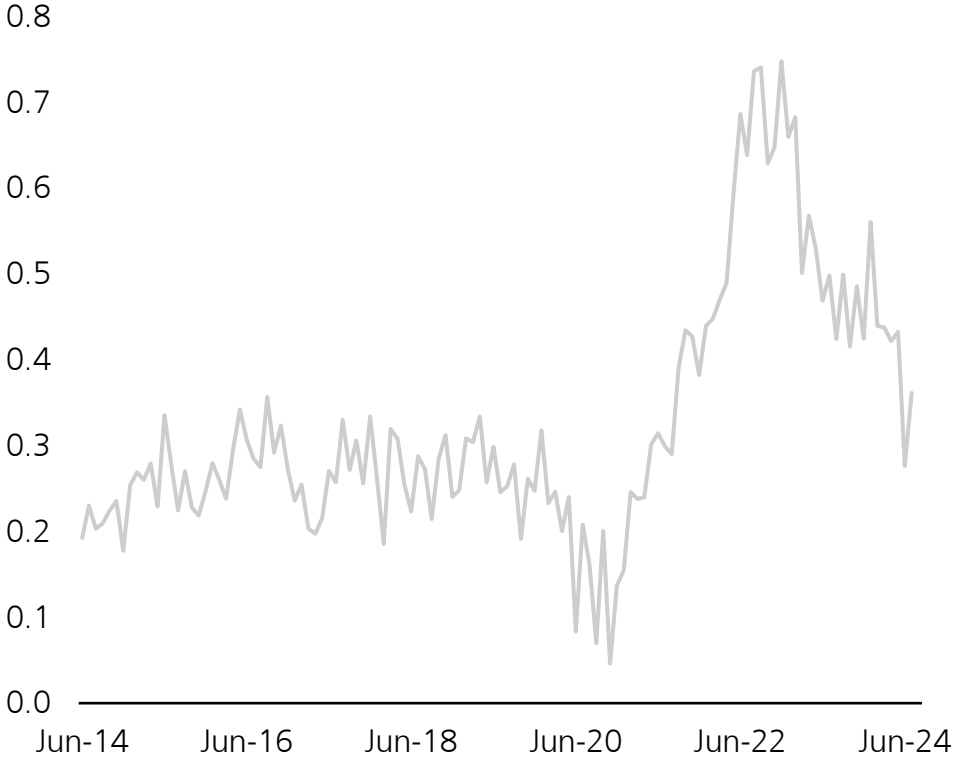
PCE and core PCE price indexes, year-over-year change in %



Source: Bloomberg, UBS, as of 28 August 2024

Rents slowdown in June was reversed in July

Owners' equivalent rent, month-over-month change in %

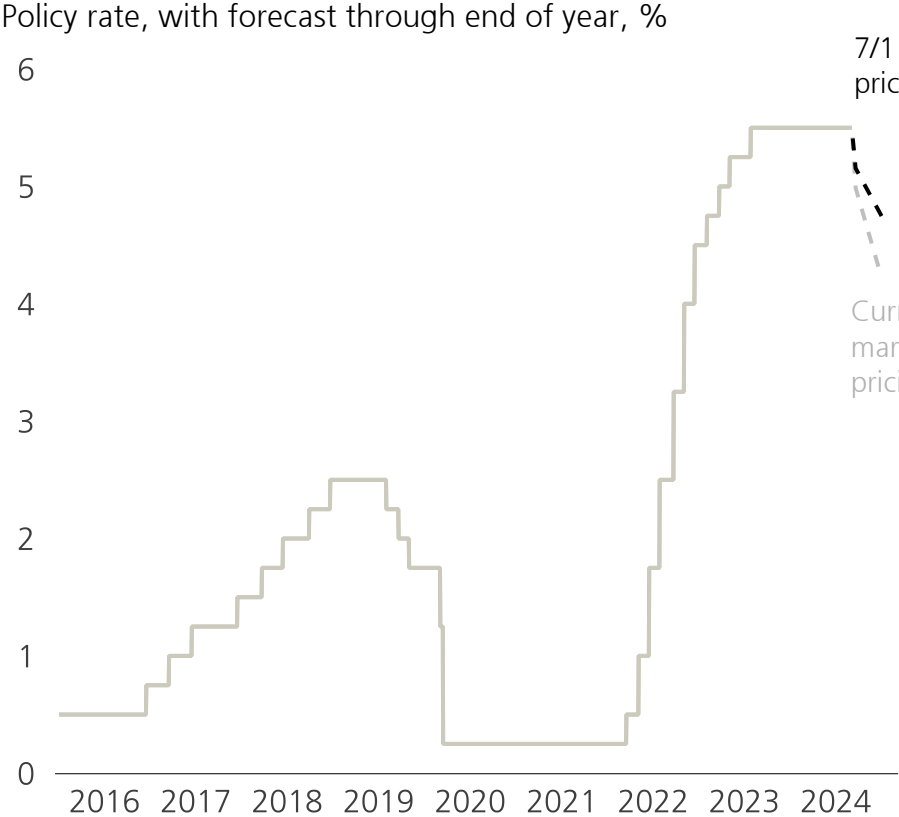


Source: Bloomberg, UBS, as of 28 August 2024

Rates: Fed set to join other central banks in cutting rates

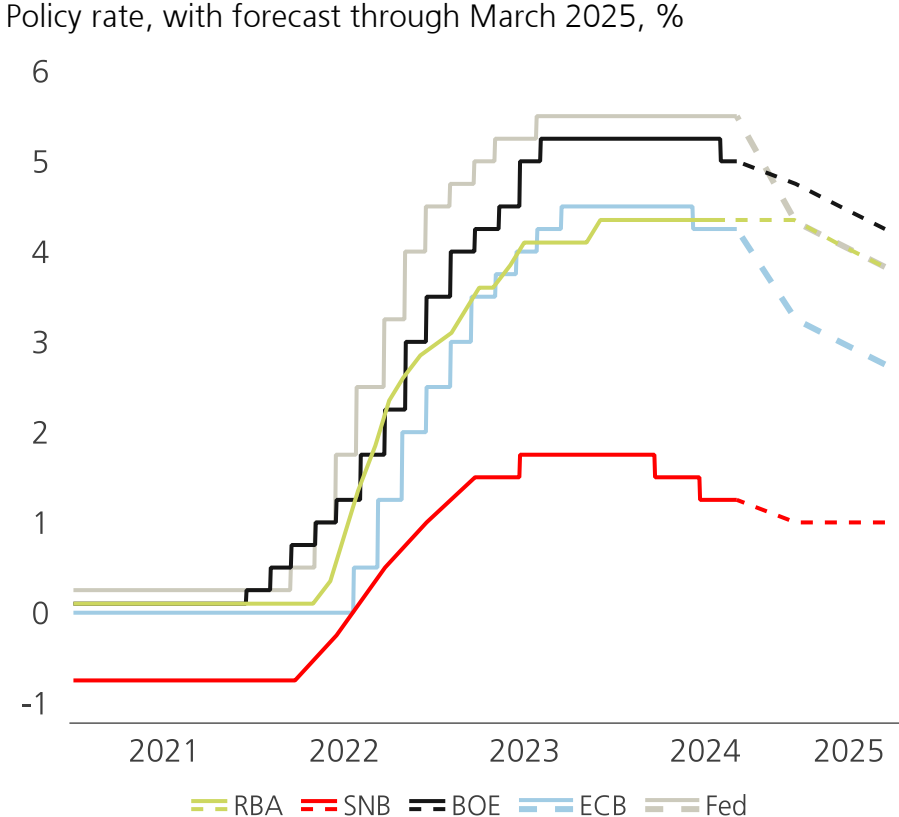
Equity market volatility amid cooler economic data has led markets to reprice rate cut expectations and for the Fed to follow the many other major central banks that have already cut rates.

Markets now expecting around 100bp of Fed rate cuts



Source: Bloomberg, UBS, as of 2 September 2024

A September cut lets the Fed join its already-cutting DM peers



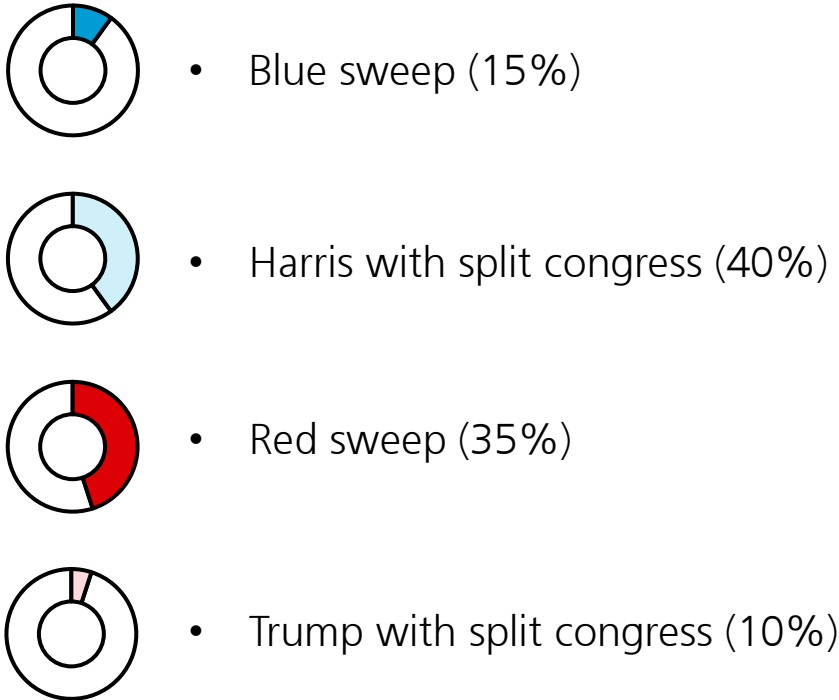
Source: Bloomberg, UBS, as of 2 September 2024

Politics: Investors are increasingly focused on the US election

The dynamics of the election have shifted significantly over the past month, and that may continue between now and 5 November. Trump built a strong lead over Biden, but Harris has overtaken him.

Four plausible scenarios, but two are most likely

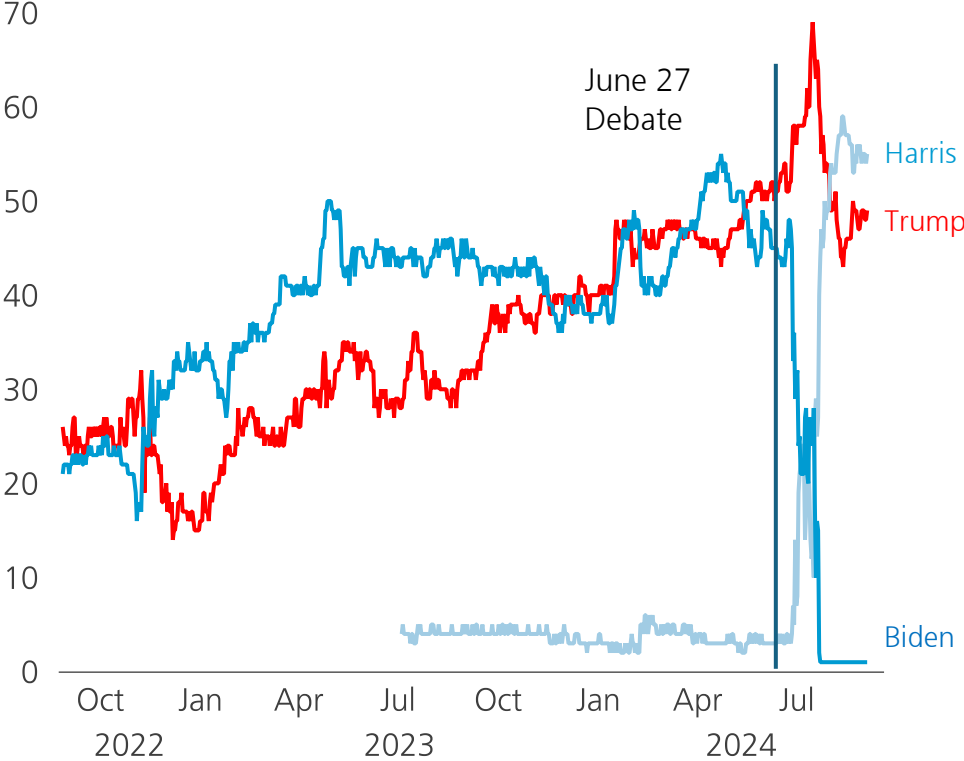
UBS CIO US election scenario probabilities



Source: UBS, as of 2 September 2024

The probability of a Trump Presidency is closer to pre-debate levels

Probability to win the election, in %



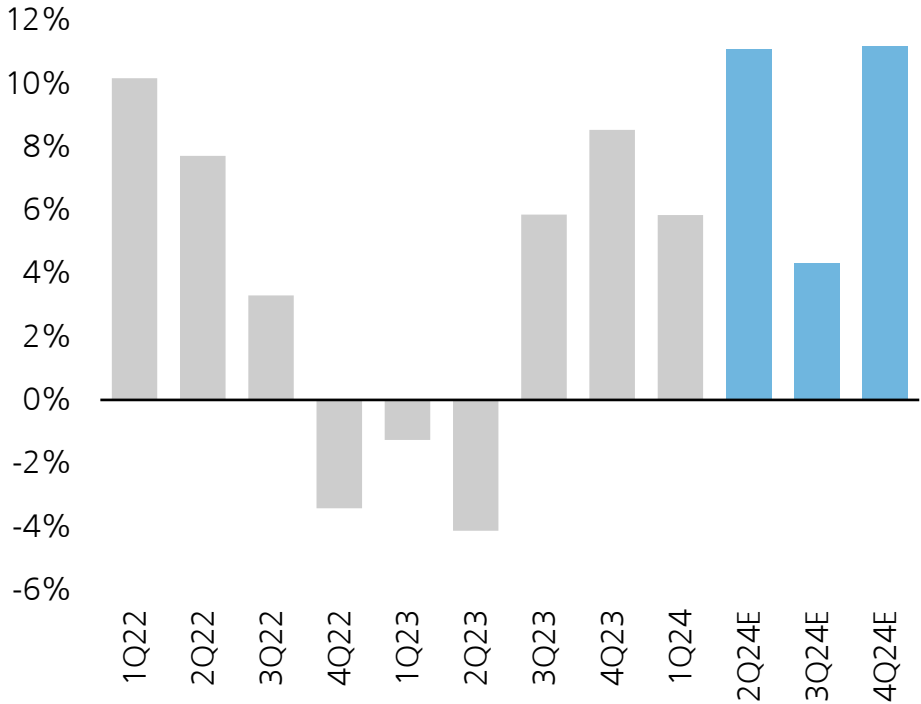
Source: PredictIt, UBS, as of 2 September 2024

Equities: Earnings growth should be supportive for US equities

The consensus forecast for S&P 500 EPS growth is 9% y/y in Q2. UBS CIO forecasts 11% and 6% EPS growth in 2024 and 2025, while bottoms-up consensus for 2025 is \$280.

Earnings growth should be healthy the rest of this year...

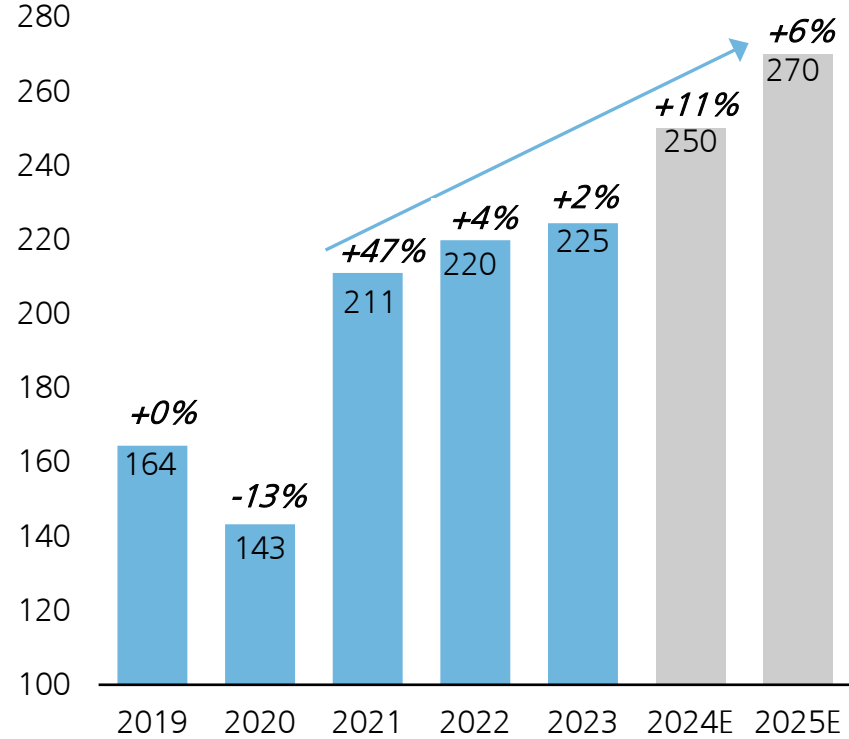
S&P 500 quarterly EPS Y/Y growth, actual and consensus estimates



Source: Bloomberg, FactSet, UBS, as of 2 September 2024

...and in 2025 as S&P 500 EPS likely make new highs

Actual and UBS CIO S&P 500 earnings per share estimates



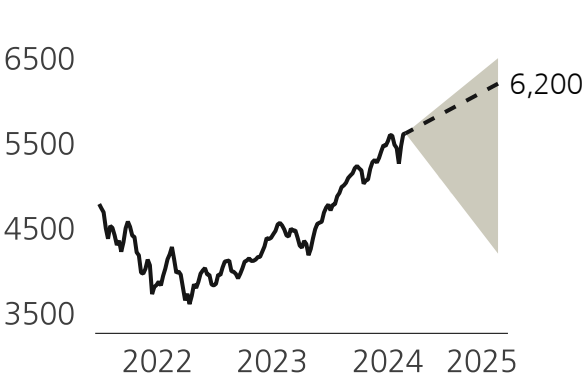
Source: FactSet, UBS, as of 2 September 2024



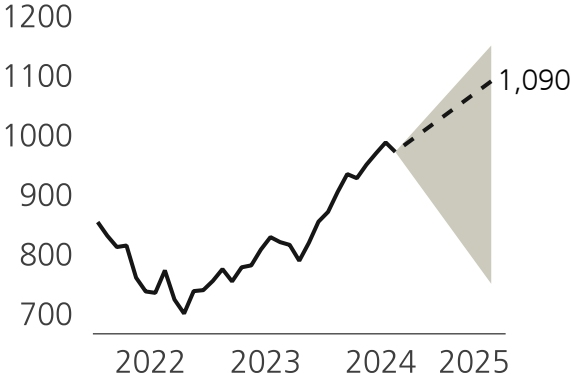
Price targets: Better risk-adjusted returns following the market sell-off

Risk/return looks a lot more attractive after recent market sell-off. Lower rates benefit high-quality fixed income, offsetting potential spread widening.

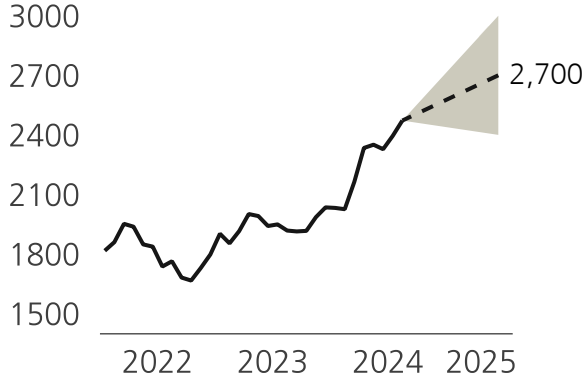
S&P 500



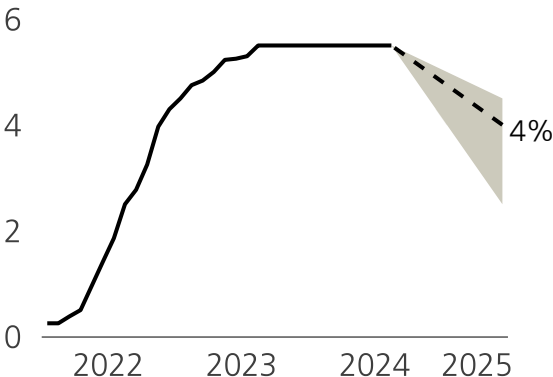
ACWI



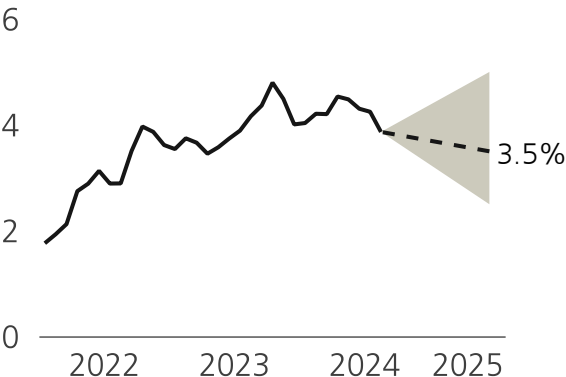
Gold



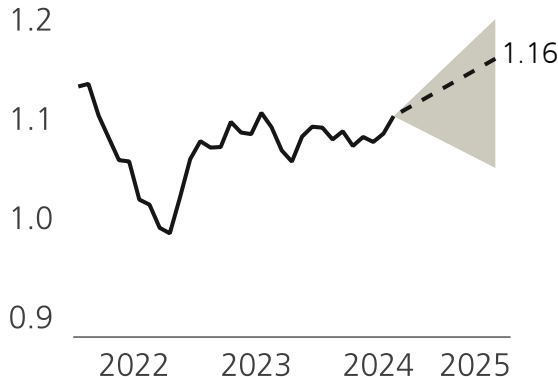
Federal Funds Rate (%)



US 10-year treasury yield (%)



EUR



Source: Bloomberg, UBS forecasts, as of 3 September 2024



Macro outlook: Moderation ahead, but to a comfortable place

Base case

Soft landing narrative intact. Our base case remains a soft landing, with the Fed starting a rate-cutting cycle in September as growth and inflation moderate.

Growth

Moderation on the margins. We expect a period of subtrend growth as consumer spending slows. With the savings rate at historically low levels and excess savings built during the pandemic mostly used up, we believe that spending will at best grow in line with income in the months ahead. The good news is that the labor market is still strong enough to provide rising wage income, and combined with slowing inflation, this should keep real income on an upward trend.

Inflation

Solidly disinflating. Businesses are reporting that consumers are pushing back against price increases, and there have been more anecdotes about price cuts, especially at stores catering to lower-income households. We therefore expect the downward trend in core inflation to continue.

Rates

We expect 100bps of rate cuts in 2024. With the unemployment rate already above the peak shown in the Fed's economic projections and very favorable developments in the recent inflation data, there is a greater sense of urgency for the Fed to cut rates toward a more neutral level. We expect the Fed to cut at each of the three remaining FOMC meetings in 2024 for a total of 100bps.

Risks

Skewed to the downside. Consumer spending is the main driver of the recovery. There are signs of increasing financial stress among households, and if spending slows, businesses may stop hiring workers, leading to a hard landing. This would lead to much more aggressive Fed rate cuts.



Investment Performance

Period Ending July 31, 2024

Prepared for:
City of Columbia, MO Police & Fire Pension
September 9, 2024

Prepared by:
L. Marc Shegoski & David Sears

Consolidated Account Report

Please contact your UBS Institutional Consultant if you have any questions regarding this report, if your financial situation, individual needs or investment objectives have changed, or if you would like to initiate or modify any investment restrictions on this account.

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Asset Allocation Review

as of September 06, 2024

Summary of Asset Allocation

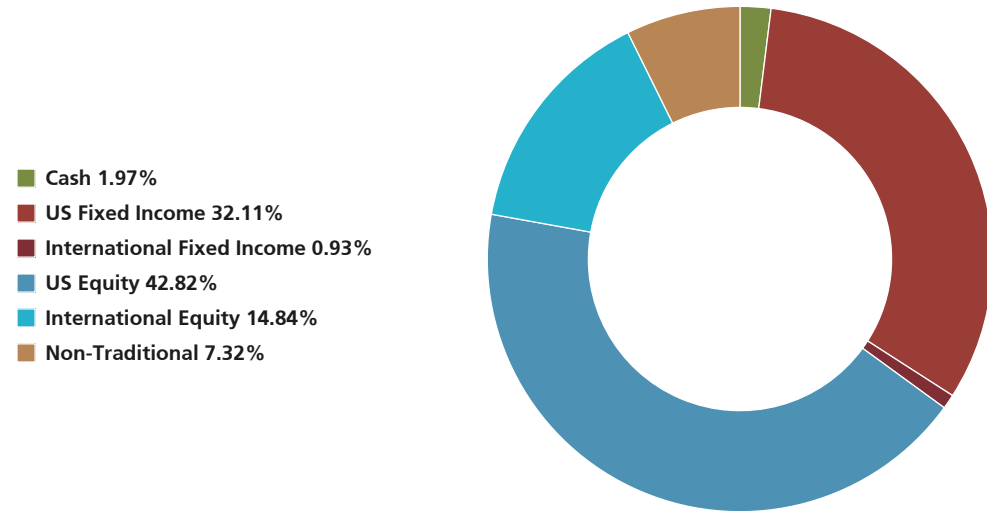
	Market value (\$)	% of Portfolio
Cash	3,894,374.39	1.97
Cash	3,894,374.39	1.97
US	3,894,374.39	1.97
Fixed Income	65,247,009.38	33.04
US	63,413,532.43	32.11
US Fixed Income	16,402,840.09	8.31
Government	21,662,683.50	10.97
Municipals	2,263,818.31	1.15
Corporate IG Credit	12,564,856.59	6.36
Corporate High Yield	10,519,333.94	5.33
International	1,833,476.95	0.93
International	582,274.86	0.29
Developed Markets	1,053,496.83	0.53
Emerging Markets	197,705.26	0.10
Equity	113,875,477.42	57.67
US	84,563,572.58	42.82
Large Cap	49,990,123.17	25.32
Mid Cap	22,300,041.12	11.29
Small Cap	12,273,408.29	6.22
International	29,311,904.84	14.84
International	967,054.78	0.49
Developed Markets	27,778,085.36	14.07
Emerging Markets	566,764.70	0.29
Commodities	0.00	0.00
Non-Traditional	14,447,262.40	7.32
Non-Traditional	14,447,262.40	7.32
Private Equity	11,808,620.90	5.98
Private Real Estate	2,638,641.50	1.34
Other	0.00	0.00
Total Portfolio	\$197,464,123.60	100%

Balanced mutual funds and Insurance & Annuity products are allocated in the 'Other' category

Consolidated report prepared for City of Columbia Group Police & Fire Pension

PX XX210	PX XX370	PX XX367	PX XX801
PX XX735	PX XX616	PX XX026	PX XX568
PX XX612	PX XX283	PX XX746	
PX XX611	PX XX095	PX XX373	
PX XX284	PX XX377	PX XX364	

Total Value: \$197,464,123.60

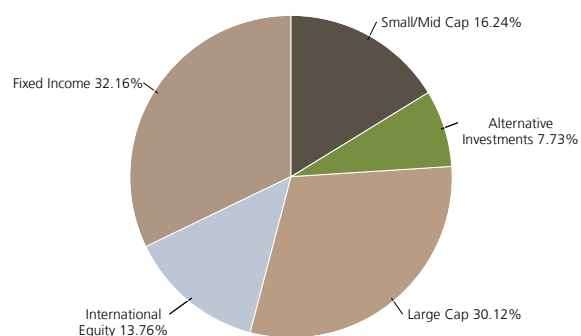


Accrued interest, if any, has been included in the total market value.

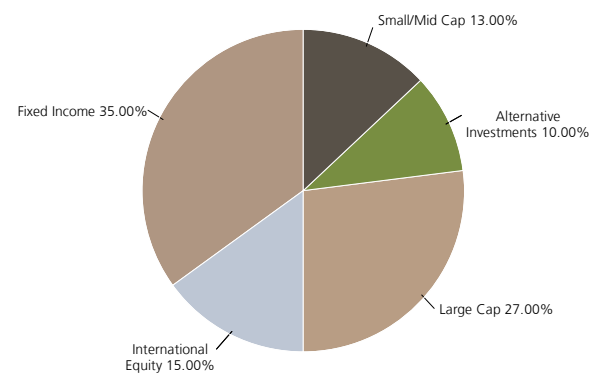
Report created on: September 09, 2024

Actual vs Target Asset Allocation
As of July 31, 2024

Actual Asset Allocation



Target Asset Allocation



	Market Value Actual	Percent Actual	Market Value Target	Percent Target	Market Value Difference	Percent Difference
Fixed Income	63,565,701.0	32.2%	69,170,955.1	35.0%	(5,605,254.2)	(2.8%)
Large Cap	59,520,327.9	30.1%	53,360,451.1	27.0%	6,159,876.8	3.1%
Small/Mid Cap	32,091,314.9	16.2%	25,692,069.0	13.0%	6,399,245.8	3.2%
International Equity	27,185,010.1	13.8%	29,644,695.1	15.0%	(2,459,684.9)	(1.2%)
Alternative Investments	15,268,946.5	7.7%	19,763,130.0	10.0%	(4,494,183.5)	(2.3%)
TOTAL FUND	\$197,631,300.4	100.0%	\$197,631,300.4	100.0%	\$0.0	0.0%

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Asset Allocation

Name	Incept. Date	Benchmark	Market Value	% Portfolio	\$ Target	\$ Difference	% Allocation Target
Large Cap							
Large Cap Value							
MFS Large Value	09/22/2011	Russell 1000 Value	\$10,316,343	5.2%	\$7,905,252	\$2,411,091	4.0%
O'Shaughnessy LCV	07/03/2014	Russell 1000 Value	\$11,495,808	5.8%	\$7,905,252	\$3,590,556	4.0%
Large Cap Growth							
Vanguard Growth	03/25/2021	CRSP US Large Cap Gr	\$20,243,110	10.2%	\$15,810,504	\$4,432,606	8.0%
Large Cap Core							
S&P 500 Index	10/29/2018	S&P 500 Index	\$17,465,067	8.8%	\$21,739,443	(\$4,274,376)	11.0%
Total Large Cap	09/22/2011	Large Cap Index	\$59,520,328	30.1%	\$53,360,451	\$6,159,877	27.0%
Small/Mid Cap							
Goldman Sachs Mid Value	09/22/2011	Russell Midcap Value	\$6,578,512	3.3%	\$7,905,252	(\$1,326,740)	4.0%
Eagle Mid Growth	03/29/2017	Russell Midcap Grwth	\$8,594,724	4.3%	\$7,905,252	\$689,472	4.0%
Kayne Anderson Small Cap Core	03/26/2019	Russell 2000	\$16,918,079	8.6%	\$9,881,565	\$7,036,514	5.0%
Total Small/Mid Cap	09/22/2011	Small/Mid Index	\$32,091,315	16.2%	\$25,692,069	\$6,399,246	13.0%
International Equity							
Delaware Intl Val	09/22/2011	MSCI EAFE NR USD	\$13,856,229	7.0%	\$14,822,348	(\$966,118)	7.5%
Capital Group Intl	10/26/2018	MSCI EAFE	\$13,328,781	6.7%	\$14,822,348	(\$1,493,567)	7.5%
Total International Equity	09/22/2011	International Index	\$27,185,010	13.8%	\$29,644,695	(\$2,459,685)	15.0%
Fixed Income							
DSAM Core Plus	01/05/2015	Bloomberg US Agg	\$23,721,331	12.0%	\$27,668,382	(\$3,947,051)	14.0%
Metlife STAMP 1-5	12/04/2019	ICE BAML Treas 1-5 Y	\$18,124,985	9.2%	\$27,668,382	(\$9,543,397)	14.0%
JP Morgan High Yield	01/04/2024	ICE BofAML 1	\$9,866,195	5.0%	\$5,928,939	\$3,937,256	3.0%
Vanguard Long-Term CB	06/27/2023	I-B US CORP 10+Y	\$11,853,190	6.0%	\$7,905,252	\$3,947,938	4.0%
Total Fixed Income	09/22/2011	Fixed Income Index	\$63,565,701	32.2%	\$69,170,955	(\$5,605,254)	35.0%
Alternative Investments							
Canyon Partners Distressed Debt BREIT	12/31/2020	BoA ML US High Yield	\$5,467,296	2.8%	\$4,940,783	\$526,514	2.5%
Blue Owl Technology	10/27/2022	NCREIF Open-End Dive	\$2,641,923	1.3%	\$9,881,565	(\$7,239,642)	5.0%
Blackstone Private Credit	04/26/2024	BoA ML US High Yield	\$2,840,176	1.4%	\$1,976,313	\$863,863	1.0%
	03/26/2024	BoA ML US High Yield	\$4,319,551	2.2%	\$2,964,470	\$1,355,082	1.5%
Total Alternative Investments	12/31/2020		\$15,268,947	7.7%	\$19,763,130	(\$4,494,184)	10.0%
TOTAL:	12/31/2000	Policy Index	\$197,631,300	100.0%	\$197,631,300	\$0	100.0%

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**Performance Summary
As of June 30, 2024**

Asset Class/Portfolio	Inception	Allocation 03/31/2024		Net Cash Flows	Investment Gain/Loss	06/30/2024 Market Value	3 mo.	YTD	Fiscal					10 yr Inception
		Percent	Market Value						09/30/2023	1 Yr	3 Yr	5 yr		
Large Cap														
Large Cap Value														
MFS Large Value	09/22/2011	5.08%	10,058,210	\$0	-\$254,004	\$9,804,206	-2.53%	6.57%	16.34%	13.57%	6.65%	9.56%	9.20%	12.28%
Russell 1000 Value							-2.17%	6.62%	16.75%	13.06%	5.52%	9.01%	8.23%	11.93%
O'Shaughnessy LCV	07/03/2014	5.64%	11,154,606	\$0	-\$274,160	\$10,880,446	-2.03%	8.87%	20.51%	20.22%	8.20%	11.70%	N/A	9.91%
Russell 1000 Value							-2.17%	6.62%	16.75%	13.06%	5.52%	9.01%	N/A	8.49%
Large Cap Growth														
Vanguard Growth	03/25/2021	10.68%	18,954,875	\$0	\$1,637,197	\$20,592,071	8.64%	20.42%	37.70%	32.68%	9.48%	--	N/A	12.47%
CRSP US Large Cap Gr							8.68%	20.54%	37.93%	32.84%	9.95%	--	N/A	12.93%
Large Cap Core														
S&P 500 Index	10/29/2018	8.85%	16,408,095	\$0	\$659,600	\$17,067,696	4.04%	14.87%	28.68%	24.48%	9.90%	15.02%	N/A	14.97%
S&P 500 Index							4.28%	15.29%	28.77%	24.56%	10.01%	15.05%	N/A	15.09%
Total Large Cap	09/22/2011	30.26%	56,575,786	\$0	\$1,768,633	\$58,344,419	3.21%	14.05%	27.54%	24.30%	8.93%	13.21%	10.70%	13.51%
Large Cap Index							3.35%	13.77%	26.88%	22.64%	8.39%	13.89%	11.98%	14.29%
Small/Mid Cap														
Goldman Sachs Mid Value	09/22/2011	3.27%	6,550,241	\$0	-\$240,492	\$6,309,749	-3.97%	4.48%	18.12%	10.80%	5.59%	10.49%	7.66%	11.27%
Russell Midcap Value							-3.40%	4.54%	17.20%	11.98%	3.65%	8.49%	7.60%	11.80%
Eagle Mid Growth	03/29/2017	4.51%	9,515,094	\$0	-\$818,449	\$8,696,645	-4.79%	3.84%	17.12%	9.69%	-0.84%	9.06%	N/A	11.68%
Russell Midcap Grwth							-3.21%	5.98%	21.39%	15.05%	-0.08%	9.93%	N/A	11.90%
Kayne Anderson Small Cap Core	03/26/2019	8.10%	16,425,307	\$0	-\$808,516	\$15,616,790	-4.92%	2.92%	18.09%	17.33%	9.25%	13.72%	N/A	14.14%
Russell 2000							-3.28%	1.73%	16.01%	10.06%	-2.58%	6.94%	N/A	7.02%
Total Small/Mid Cap	09/22/2011	15.88%	32,490,642	\$0	-\$1,867,457	\$30,623,185	-4.67%	3.55%	17.79%	13.30%	5.11%	11.44%	9.12%	12.45%
Small/Mid Index							-3.28%	3.61%	17.76%	11.92%	-0.04%	8.31%	8.24%	11.55%
International Equity														
Delaware Intl Val	09/22/2011	6.86%	12,961,053	\$0	\$257,750	\$13,218,803	1.99%	5.16%	14.80%	13.25%	4.37%	5.93%	3.95%	6.25%
MSCI EAFE							-0.42%	5.34%	16.32%	11.54%	2.89%	6.46%	4.33%	7.05%
Capital Group Intl	10/26/2018	6.78%	13,027,315	\$0	\$49,333	\$13,076,648	0.31%	5.93%	17.66%	8.64%	1.53%	7.22%	N/A	8.70%
MSCI EAFE							-0.42%	5.34%	16.32%	11.54%	2.89%	6.46%	N/A	7.19%
Total International Equity	09/22/2011	13.64%	25,988,368	\$0	\$307,083	\$26,295,451	1.14%	5.55%	16.21%	10.91%	2.92%	6.56%	4.64%	6.80%
International Index							-0.42%	5.34%	16.32%	11.54%	2.89%	6.46%	4.45%	7.06%
Fixed Income														

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**Performance Summary
As of June 30, 2024**

Asset Class/Portfolio	Inception	Allocation 03/31/2024		Net Cash Flows	Investment Gain/Loss	06/30/2024 Market Value	Fiscal							
		Percent	Market Value				09/30/2023	3 mo.	YTD	06/30/2024	1 Yr	3 Yr	5 yr	10 yr
DSAM Core Plus	01/05/2015	12.07%	23,255,245	\$0	\$17,926	\$23,273,171	0.07%	-0.62%	6.01%	2.37%	-3.64%	-0.19%	N/A	1.27%
Barclays Aggregate							0.07%	-0.71%	6.06%	2.63%	-3.02%	-0.23%	N/A	1.00%
Metlife STAMP 1-5	12/04/2019	9.35%	20,550,234	-\$2,800,500	\$269,336	\$18,019,071	0.97%	1.25%	4.48%	4.80%	0.96%	--	N/A	1.13%
ICE BAML Treas 1-5 Y							0.82%	0.80%	3.93%	4.16%	-0.35%	--	N/A	0.60%
JP Morgan High Yield	01/04/2024	5.05%	8,883,957	\$873,574	-\$27,771	\$9,729,759	1.05%	--	--	--	--	--	N/A	2.02%
ICE BofAML 1							1.43%	--	--	--	--	--	N/A	2.54%
Vanguard Long-Term CB	06/27/2023	5.96%	11,697,834	\$0	-\$213,193	\$11,484,641	-1.82%	-3.42%	9.94%	2.88%	--	--	N/A	2.88%
I-B US CORP 10+Y							-1.45%	-2.64%	10.28%	2.66%	--	--	N/A	2.66%
Total Fixed Income	09/22/2011	32.42%	64,387,269	-\$1,926,926	\$46,298	\$62,506,642	0.36%	-0.06%	6.22%	4.35%	-1.23%	0.79%	2.04%	2.24%
Fixed Income Index							0.25%	-0.04%	6.14%	4.34%	-1.27%	0.78%	1.66%	1.61%
Alternative Investments														
Canyon Partners Distressed Debt	12/31/2020	2.77%	6,202,385	-\$873,574	\$6,066	\$5,334,877	0.53%	3.15%	6.29%	11.34%	6.85%	--	N/A	10.06%
BoA ML US High Yield							1.09%	2.62%	9.87%	10.46%	1.65%	--	N/A	2.47%
BREIT	10/27/2022	1.37%	2,613,129	\$0	\$29,193	\$2,642,322	0.48%	2.14%	-1.71%	0.26%	--	--	N/A	0.01%
NCREIF Open-End Dive							-0.45%	-2.81%	-7.50%	-9.26%	--	--	N/A	-11.71%
Blue Owl Technology	04/26/2024	1.47%		\$2,800,500	\$24,894	\$2,825,394	--	--	--	--	--	--	N/A	0.42%
BoA ML US High Yield							--	--	--	--	--	--	N/A	2.11%
Blackstone Private Credit	03/26/2024	2.20%	4,200,000	\$0	\$42,821	\$4,242,821	1.97%	--	--	--	--	--	N/A	1.97%
BoA ML US High Yield							1.09%	--	--	--	--	--	N/A	1.09%
Total Alternative Investments	12/31/2020	7.80%	13,015,514	\$1,926,926	\$102,975	\$15,045,414	0.83%	3.11%	4.00%	7.94%	4.99%	--	N/A	8.41%
TOTAL:	12/31/2000	100.00%	192,457,578	\$0	\$357,532	\$192,815,111	0.47%	5.36%	15.38%	12.50%	3.46%	7.77%	6.63%	6.51%
Policy Index							0.55%	5.01%	14.31%	10.70%	2.38%	6.68%	6.21%	5.81%
Columbia Composite Benchmark							0.51%	5.17%	15.23%	11.72%	2.43%	7.44%	6.66%	--

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**Performance Summary
As of July 31, 2024**

Asset Class/Portfolio	Inception	Allocation 04/30/2024		Net Cash Flows	Investment Gain/Loss	07/31/2024 Market Value	3 mo.	YTD	Fiscal 09/30/2023					10 yr Inception
		Percent	Market Value						07/31/2024	1 Yr	3 Yr	5 yr		
Large Cap														
Large Cap Value														
MFS Large Value	09/22/2011	5.22%	9,615,391	\$0	\$700,952	\$10,316,343	7.29%	12.14%	22.41%	16.09%	7.66%	10.27%	9.93%	12.64%
Russell 1000 Value							7.42%	12.08%	22.72%	14.80%	7.01%	9.92%	8.96%	12.28%
O'Shaughnessy LCV	07/03/2014	5.82%	10,584,279	\$0	\$911,528	\$11,495,808	9.09%	15.03%	27.33%	20.99%	9.96%	12.65%	10.43%	10.43%
Russell 1000 Value							7.42%	12.08%	22.72%	14.80%	7.01%	9.92%	8.96%	8.96%
Large Cap Growth														
Vanguard Growth	03/25/2021	10.24%	18,159,097	\$0	\$2,084,014	\$20,243,110	11.48%	18.38%	35.37%	26.22%	7.75%	--	N/A	11.57%
CRSP US Large Cap Gr							11.50%	18.47%	35.56%	26.36%	8.14%	--	N/A	12.00%
Large Cap Core														
S&P 500 Index	10/29/2018	8.84%	15,747,014	-\$150,000	\$1,868,053	\$17,465,067	10.02%	16.61%	30.63%	21.87%	9.44%	14.90%	N/A	15.03%
S&P 500 Index							10.05%	16.70%	30.34%	22.15%	9.60%	15.00%	N/A	15.10%
Total Large Cap	09/22/2011	30.12%	54,105,781	-\$150,000	\$5,564,546	\$59,520,328	10.38%	16.64%	30.44%	22.59%	9.00%	13.27%	11.31%	13.61%
Large Cap Index							9.56%	15.55%	28.87%	20.49%	8.21%	13.91%	12.32%	14.33%
Small/Mid Cap														
Goldman Sachs Mid Value	09/22/2011	3.33%	6,175,181	\$0	\$403,331	\$6,578,512	6.20%	8.93%	23.15%	11.18%	6.78%	11.05%	8.41%	11.56%
Russell Midcap Value							8.09%	10.86%	24.28%	13.79%	5.48%	9.59%	8.56%	12.23%
Eagle Mid Growth	03/29/2017	4.35%	8,597,641	\$0	-\$2,918	\$8,594,724	-0.50%	2.45%	15.55%	6.03%	-2.24%	8.31%	N/A	11.33%
Russell Midcap Grwth							3.38%	6.62%	22.13%	12.35%	-0.22%	9.55%	N/A	11.85%
Kayne Anderson Small Cap Core	03/26/2019	8.56%	15,088,769	\$0	\$1,829,310	\$16,918,079	12.12%	11.49%	27.93%	21.65%	11.57%	14.97%	N/A	15.63%
Russell 2000							14.62%	12.07%	27.79%	14.25%	1.85%	8.91%	N/A	8.87%
Total Small/Mid Cap	09/22/2011	16.24%	29,861,591	\$0	\$2,229,724	\$32,091,315	7.26%	8.47%	23.38%	14.48%	6.10%	12.00%	9.93%	12.78%
Small/Mid Index							10.05%	10.45%	25.53%	13.87%	2.40%	9.44%	9.42%	12.02%
International Equity														
Delaware Intl Val	09/22/2011	7.01%	12,933,091	\$0	\$923,138	\$13,856,229	7.14%	10.23%	20.34%	14.94%	6.29%	7.46%	4.79%	6.60%
MSCI EAFE							5.20%	8.43%	19.73%	11.21%	3.63%	7.36%	4.84%	7.24%
Capital Group Intl	10/26/2018	6.74%	12,612,299	\$0	\$716,482	\$13,328,781	5.87%	8.09%	20.06%	9.20%	1.95%	7.86%	N/A	8.96%
MSCI EAFE							5.20%	8.43%	19.73%	11.21%	3.63%	7.36%	N/A	7.62%
Total International Equity	09/22/2011	13.76%	25,545,391	\$0	\$1,639,619	\$27,185,010	6.51%	9.18%	20.20%	12.05%	4.07%	7.66%	5.35%	7.04%
International Index							5.20%	8.43%	19.73%	11.21%	3.63%	7.36%	4.93%	7.26%
Fixed Income														

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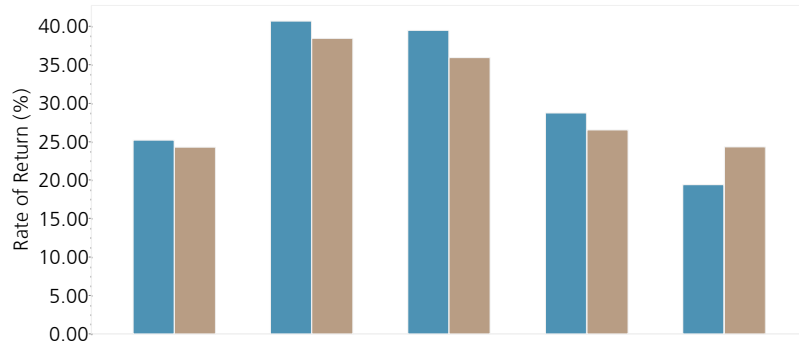
**Performance Summary
As of July 31, 2024**

Asset Class/Portfolio	Inception	Allocation 04/30/2024		Net Cash Flows	Investment Gain/Loss	07/31/2024 Market Value	Fiscal 09/30/2023							
		Percent	Market Value				3 mo.	YTD	07/31/2024	1 Yr	3 Yr	5 yr	10 yr	Inception
DSAM Core Plus	01/05/2015	12.00%	22,616,858	\$0	\$1,104,473	\$23,721,331	4.68%	1.20%	7.95%	4.75%	-3.31%	0.12%	N/A	1.45%
Barclays Aggregate							5.06%	1.61%	8.53%	5.10%	-2.63%	0.19%	N/A	1.23%
Metlife STAMP 1-5	12/04/2019	9.17%	17,709,451	-\$100,000	\$515,534	\$18,124,985	3.07%	2.50%	5.77%	5.74%	0.48%	--	N/A	1.38%
ICE BAML Treas 1-5 Y							3.09%	2.29%	5.46%	5.39%	0.02%	--	N/A	0.91%
JP Morgan High Yield	01/04/2024	4.99%	8,683,814	\$873,574	\$308,807	\$9,866,195	3.37%	--	--	--	--	--	N/A	3.45%
ICE BofAML 1							2.71%	--	--	--	--	--	N/A	3.74%
Vanguard Long-Term CB	06/27/2023	6.00%	11,121,633	\$0	\$731,557	\$11,853,190	6.58%	-0.32%	13.47%	5.08%	--	--	N/A	5.69%
I-B US CORP 10+Y							6.71%	0.47%	13.81%	5.99%	--	--	N/A	5.47%
Total Fixed Income	09/22/2011	32.16%	60,131,757	\$773,574	\$2,660,370	\$63,565,701	4.32%	1.76%	8.15%	6.10%	-1.12%	1.11%	2.27%	2.37%
Fixed Income Index							4.43%	2.02%	8.34%	6.27%	-0.83%	1.16%	1.89%	1.76%
Alternative Investments														
Canyon Partners Distressed Debt	12/31/2020	2.77%	6,273,687	-\$873,574	\$67,183	\$5,467,296	4.13%	5.71%	8.93%	8.94%	8.17%	--	N/A	10.57%
BoA ML US High Yield							4.11%	4.63%	12.03%	11.04%	2.19%	--	N/A	2.97%
BREIT	10/27/2022	1.34%	2,629,449	\$0	\$12,474	\$2,641,923	0.00%	2.00%	-1.83%	-1.09%	--	--	N/A	-0.06%
NCREIF Open-End Dive							-0.45%	-2.81%	-7.50%	-9.26%	--	--	N/A	-11.18%
Blue Owl Technology	04/26/2024	1.44%	2,800,500	\$0	\$39,676	\$2,840,176	1.53%	--	--	--	--	--	N/A	1.53%
BoA ML US High Yield							4.11%	--	--	--	--	--	N/A	4.11%
Blackstone Private Credit	03/26/2024	2.19%	4,200,000	\$0	\$119,551	\$4,319,551	2.72%	--	--	--	--	--	N/A	2.85%
BoA ML US High Yield							4.11%	--	--	--	--	--	N/A	3.07%
Total Alternative Investments	12/31/2020	7.73%	15,903,637	-\$873,574	\$238,884	\$15,268,947	2.54%	4.46%	5.36%	5.63%	5.88%	--	N/A	8.60%
TOTAL:	12/31/2000	100.00%	185,548,157	-\$250,000	\$12,333,144	\$197,631,300	6.71%	8.11%	18.39%	12.81%	3.82%	8.12%	7.08%	6.60%
Policy Index							6.49%	7.68%	17.22%	11.17%	2.94%	7.11%	6.62%	5.90%
Columbia Composite Benchmark							6.84%	8.03%	18.36%	12.03%	3.03%	7.88%	7.11%	--

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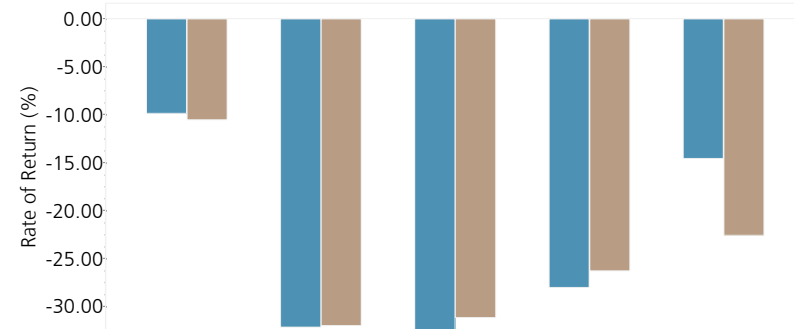
Market Cycle Analysis

Up Market Performance



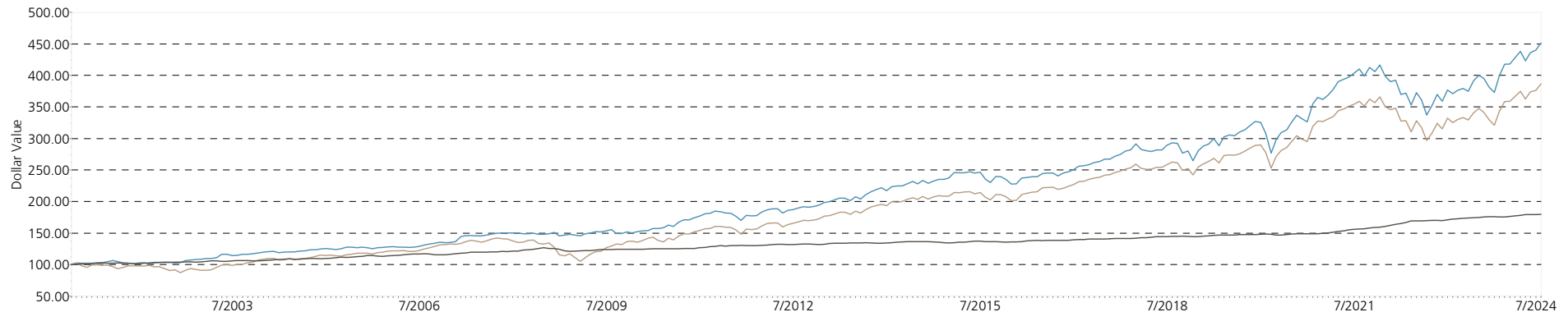
	One Year	Three Years	Five Years	Ten Years	Since Inception
Total Fund	25.24	40.70	39.49	28.75	19.44
Policy Index	24.29	38.47	35.96	26.56	24.38
Difference	0.94	2.24	3.53	2.19	-4.94
Ratio	1.04	1.06	1.10	1.08	0.80
Up Periods	8	21	39	82	187

Down Market Performance



	One Year	Three Years	Five Years	Ten Years	Since Inception
Total Fund	-9.92	-32.16	-32.64	-28.05	-14.59
Policy Index	-10.56	-32.03	-31.21	-26.34	-22.59
Difference	0.64	-0.13	-1.42	-1.72	8.00
Ratio	0.94	1.00	1.05	1.07	0.65
Down Periods	4	15	21	38	96

Growth of \$100 Dollars



	Latest Month	Year To Date	One Year	Three Years	Five Years	Ten Years	Since Inception
TOTAL FUND	\$ 103	\$ 108	\$ 113	\$ 112	\$ 148	\$ 198	\$ 451
Policy Index	\$ 103	\$ 108	\$ 111	\$ 109	\$ 141	\$ 190	\$ 386
CPI	\$ 100	\$ 102	\$ 103	\$ 115	\$ 122	\$ 131	\$ 180

*While the CPI measures changes in the prices for goods and services, movements in the CPI that have occurred in the past are not necessarily indicative of changes that may occur in the future.
 Policy Index: 32% Bloomberg US Aggregate Bond, 27% Russell 1000, 15% MSCI Net EAFE, 8% Russell Midcap, 5% HFRI Fund of Funds Composite Index, 5% NFI-ODCE-EQ, 5% Russell 2000, 3% ICE BofAML High Yield Master Index
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City of Columbia, MO Police & Fire Pension

Period Ending July 31, 2024

Account Values								
	4/2024-7/2024	Latest Quarter	Fiscal YTD	Year to Date	One Year	Three Years	Five Years	Since Inception
Beginning Mkt Value	\$185,548,156.64	\$192,815,110.77	\$167,538,405.01	\$183,151,741.75	\$176,950,170.64	\$182,617,866.63	\$142,359,213.90	\$29,386,201.26
Net Contributions	(\$250,000.00)	(\$250,000.00)	(\$498,709.23)	(\$499,329.53)	(\$1,773,709.23)	(\$5,561,231.04)	(\$9,473,147.23)	\$14,937,317.03
Investment Earnings	\$12,333,143.72	\$5,066,189.59	\$30,591,604.58	\$14,978,888.14	\$22,454,838.95	\$20,574,664.77	\$64,745,158.69	\$153,307,610.47
Ending Mkt Value	\$197,631,300.36	\$197,631,300.36	\$197,631,300.36	\$197,631,300.36	\$197,631,300.36	\$197,631,300.36	\$197,631,300.36	\$197,631,300.36

Returns										
	4/2024-7/2024	Latest Quarter	Fiscal YTD	Calendar YTD	One Year	Three Years	Five Years	Ten Years	Fifteen Years	Since Inception
Account	6.71%	2.60%	18.39%	8.11%	12.81%	3.82%	8.12%	7.08%	7.45%	6.60%
Policy Index	6.49%	2.55%	17.22%	7.68%	11.17%	2.94%	7.11%	6.62%	7.72%	5.90%
Difference	0.22%	0.06%	1.17%	0.42%	1.64%	0.88%	1.01%	0.46%	-0.27%	0.70%

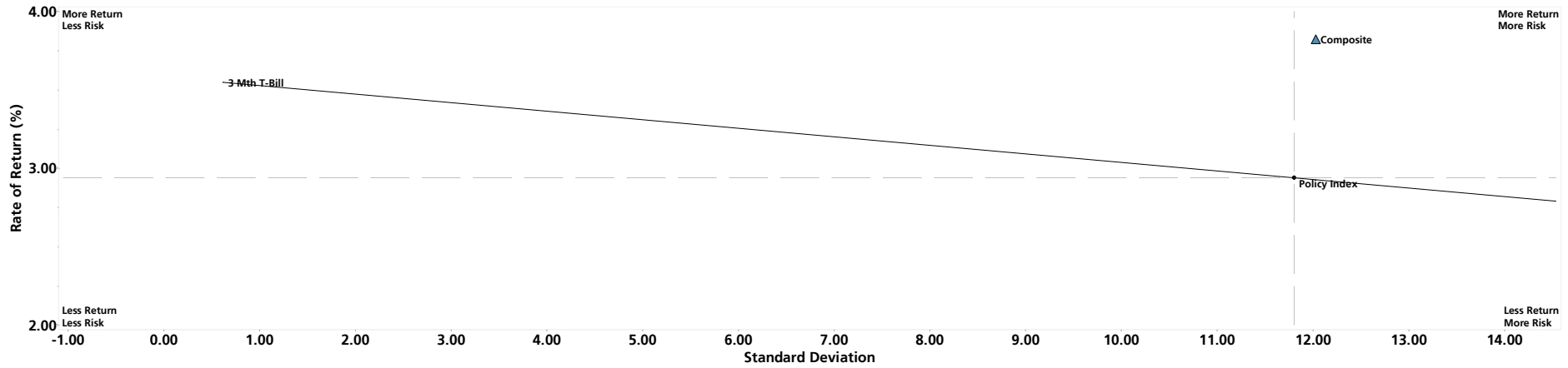
Calendar Year Returns												
	2024	2023	2022	2021	2020	2019	2018	2017	2016	2015	2014	2013
Account	8.11%	16.36%	-13.78%	14.05%	11.65%	23.40%	-6.10%	13.95%	5.24%	0.18%	5.87%	14.17%
Policy Index	7.68%	13.83%	-13.89%	11.58%	13.43%	19.53%	-4.59%	13.23%	7.88%	-0.54%	6.70%	13.38%
Difference	0.42%	2.54%	0.11%	2.46%	-1.77%	3.86%	-1.51%	0.72%	-2.64%	0.72%	-0.84%	0.79%

Policy Index: 32% Bloomberg US Aggregate Bond, 27% Russell 1000, 15% MSCI Net EAFE, 8% Russell Midcap, 5% HFRI Fund of Funds Composite Index, 5% NFI-ODCE-EQ, 5% Russell 2000, 3% ICE BofAML High Yield Master Index

This report is provided for informational purposes only. The information shown was obtained from sources believed to be reliable, the accuracy of which is not guaranteed. Account statements provided by UBS or other financial institutions are the official record of your holdings, balances, transactions and security values and are not amended or superseded by the information in this report. Information is current as of the date shown. Past performance is no guarantee of future returns. See IMPORTANT INFORMATION for assumptions and limitations of the analysis in this report, risk considerations, valuation, fees and other details regarding this report. For historical primary index information, see Benchmark Comparisons Used in this Report.

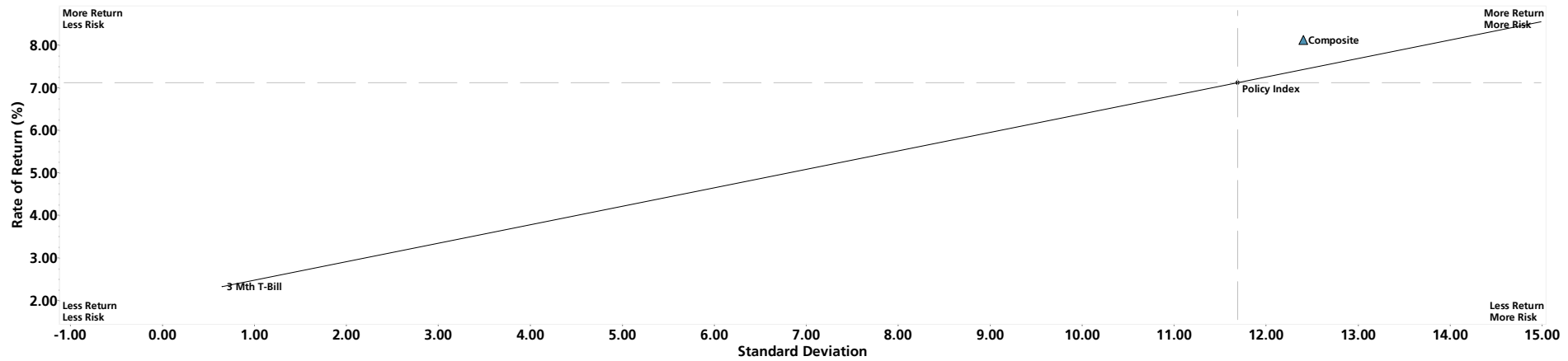
Risk vs Reward

Three Years



	Return	Sharpe Ratio	Std Dev	Alpha	Beta	R-Squared	Info Ratio
▲ Composite	3.82	0.02	12.03	0.88	1.01	99.12	0.78

Five Years



	Return	Sharpe Ratio	Std Dev	Alpha	Beta	R-Squared	Info Ratio
▲ Composite	8.12	0.47	12.40	0.75	1.05	98.58	0.64

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Private Equity Investment Details

as of September 06, 2024

	Inception Date	Commitment	Contributions	Distribution	Value	Value Date	Total to Paid In	Distrib. to Paid In	Annualized > 1 year Inception to date Money Weighted Return / IRR
Canyon Distressed Opportunity Fund III (Cayman) L.P.	12/31/2020	5,000,000.00	5,467,778.00	-2,295,642.48	4,588,622.00	07/31/2024	1.26	0.42	10.06
Total Portfolio		\$5,000,000.00	\$5,467,778.00	-\$2,295,642.48	\$4,588,622.00		1.26	0.42	

All data shown is through the specified Value Date above. No activity is included after this date. Only private Equity funds included. Performance returns are net of fees.

Past performance does not guarantee future results and current performance may be lower/higher than past data presented.

Report created on: September 09, 2024



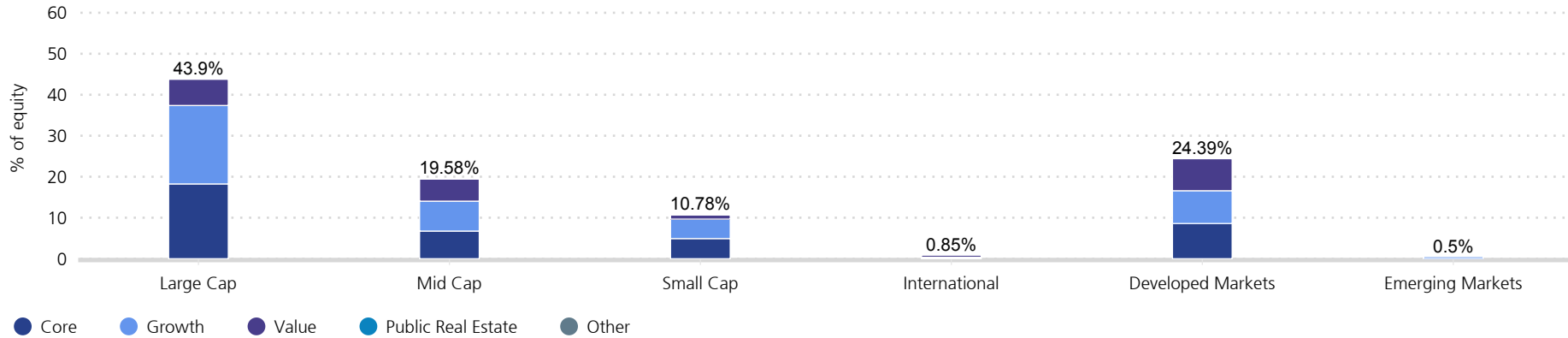
Equity Summary

as of September 06, 2024

Consolidated report prepared for City of Columbia
Group Police & Fire Pension

PX XX210	PX XX370	PX XX367	PX XX801
PX XX735	PX XX616	PX XX026	PX XX568
PX XX612	PX XX283	PX XX746	
PX XX611	PX XX095	PX XX373	
PX XX284	PX XX377	PX XX364	

Equity Capitalization and Style Analysis



Balanced mutual funds and Insurance & Annuity products are allocated in the 'Other' category

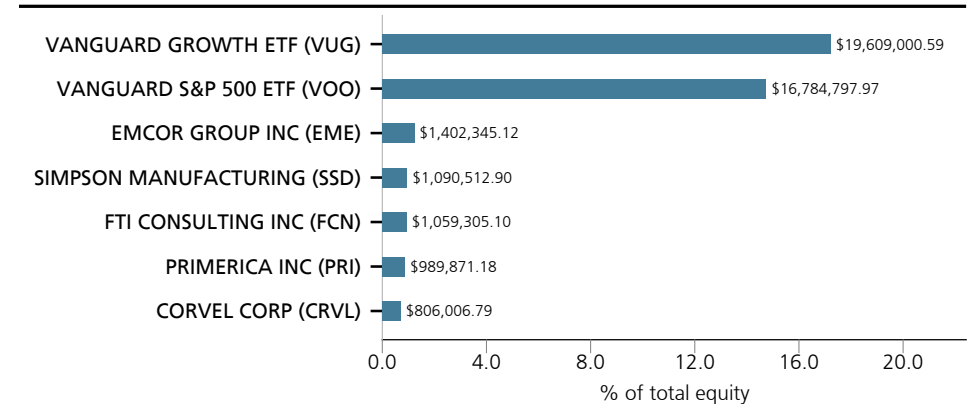
Equity Sector Analysis

Compared to S&P 500 index

	Value on 09/06/2024 (\$)	Actual (%)	Model (%)	Gap (%)
Communication Services	6,718,819.01	5.91	9.05	-3.14
Consumer Discretionary	11,017,890.32	9.68	10.16	-0.48
Consumer Staples	6,753,112.96	5.94	6.86	-0.92
Energy	4,422,285.79	3.89	3.45	0.44
Financials	17,676,147.62	15.54	12.77	2.77
Health Care	12,459,026.03	10.95	12.63	-1.68
Industrials	22,244,040.95	19.55	7.93	11.62
Information Technology	23,524,220.72	20.68	29.73	-9.05
Materials	3,336,408.42	2.93	2.18	0.75
Real Estate	1,734,154.35	1.52	2.45	-0.93
Utilities	3,886,393.99	3.41	2.42	0.99
Total classified equity	\$113,772,500.16			
Unclassified Securities	73,271.70			

Largest Equity Holdings

Holdings





PX XX210	PX XX370	PX XX367	PX XX801
PX XX735	PX XX616	PX XX026	PX XX568
PX XX612	PX XX283	PX XX746	
PX XX611	PX XX095	PX XX373	
PX XX284	PX XX377	PX XX364	

Bond Summary

as of September 06, 2024

Bond Overview

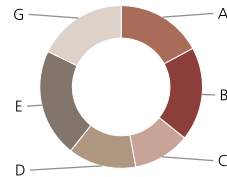
Total quantity	67,597,549
Total market value	\$52,487,921.10
Total accrued interest	\$415,202.53
Total market value plus accrued interest	\$52,903,123.63
Total estimated annual bond interest	\$2,272,149.73
Average coupon	4.31%
Average current yield	4.33%
Average yield to maturity	4.83%
Average yield to worst	4.77%
Average modified duration	4.01
Average effective maturity	10.07

Investment Type Allocation

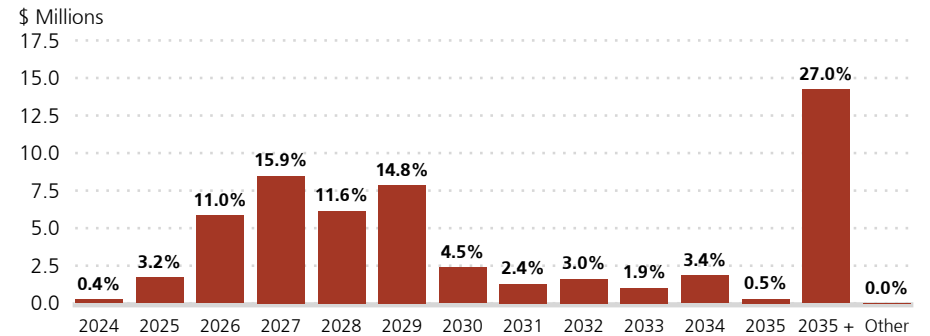
Investment type	Taxable (\$)	Tax-exempt / deferred (\$)	Total (\$)	% of bond port.
Asset/Mortgage	0.00	15,265,869.47	15,265,869.47	28.86
Municipals	0.00	2,263,818.31	2,263,818.31	4.28
U.S. corporates	0.00	24,917,667.48	24,917,667.48	47.10
U.S. federal agencies	0.00	345,491.20	345,491.20	0.65
U.S. treasuries	0.00	10,110,277.17	10,110,277.17	19.11
Total	\$0.00	\$52,903,123.63	\$52,903,123.63	100%

Credit Quality of Bond Holdings

Effective credit rating	Issues	Value on 09/06/2024 (\$)	% of port.
A Aaa/AAA/AAA	51	9,073,003.37	17.25
B Aa/AA/AA	30	9,868,579.76	18.67
C A/A/A	52	5,991,948.53	11.30
D Baa/BBB/BBB	86	7,147,662.12	13.44
E Non-investment grade	104	11,395,521.04	21.39
F Certificate of deposit	0	0.00	0.00
G Not rated	133	9,426,408.83	17.95
Total	456	\$52,903,123.63	100%



Bond Maturity Schedule



Effective maturity schedule

Cash, mutual funds and some preferred securities are not included.

Includes all fixed income securities in the selected portfolio. Average yields and durations exclude Structured Product, Pass-Through, Perpetual Preferred, and Foreign securities. Accrued interest, if any, has been included in the total market value.

IMPORTANT INFORMATION

This report is provided for informational purposes only, does not constitute an offer to buy or sell securities or investment products, does not constitute a recommendation that you buy, sell or hold securities or investment products, and is current as of the date shown. It may include information regarding your UBS Institutional Consulting ("IC") or UBS Consolidated Advisory Program ("CAP") accounts held at various UBS entities including UBS Financial Services Inc., UBS Securities LLC and UBS AG (collectively, "UBS" or "UBS entities"), as well as accounts you hold at other financial institutions. Accounts included in this report are identified at the beginning of the report. Information may be shown for individual accounts or as one or more combined portfolios; the accounts included in each portfolio are also identified at the beginning of the report.

If this output is provided as part of a proposal, it is marketing material. It is provided to you for discussion and consideration and is intended to aid (and be used by) your UBS Consultant or Financial Advisor in providing you with actual individualized investment recommendations. Therefore, they should only be considered in conjunction with the actual recommendations and advice of your UBS Consultant or Financial Advisor, our standard account documents, agreements, disclosures, including the ADV Disclosure for applicable advisory programs, and the additional factors that warrant consideration for your particular financial situation, including costs. The options presented are for discussion purposes only and do not constitute a recommendation to buy, hold, or sell any securities or investment products. This material is not intended and should not be construed to constitute investment advice and does not itself create a fiduciary relationship between you and UBS. You must make independent decisions with respect to any proposals contained within this report. In making those decisions you have reviewed the terms of any Plan with respect to which you are a fiduciary and your obligations to any such Plan under ERISA. If you would like more details about any of the information provided, or personalized recommendations or advice, please contact your UBS Financial Advisor.

Accounts and Assets Included: UBS account statements are the only official records of holdings, balances, transactions, and security values of assets held in UBS accounts and are not replaced, amended or superseded by any of the information presented in this report. If assets that you hold at other financial institutions are included in this report, they are being provided as part of your IC or CAP Services Agreement or you have asked us to include those assets as an accommodation but they are not included as part of your IC or CAP Services Agreement with us. If assets are included solely as an accommodation, those assets are identified as such in this report. In either situation, the inclusion of assets held at another financial institution is based on information, including valuation and transactional information, furnished to UBS by you or your custodian. We have not verified, and are not responsible for, the accuracy or completeness of this information. This report is not intended to provide you with consolidated information or reporting regarding your holdings at other firms. You should review and maintain the original documents for those assets, such as account statements for individual accounts held away from UBS. Those documents contain their record of holdings, balances, transactions, and security values of assets held in those accounts, as well as notices, disclosures and other information important to you, and may also serve as a reference should questions arise regarding the accuracy of the information in this report. UBS Financial Services Inc. SIPC coverage would only apply to those assets held at UBS Financial Services Inc. You should contact your financial representative at any other financial institution where you hold an account to determine the availability of SIPC coverage, if any. We require that you hold and purchase only eligible managed assets in your UBS advisory accounts.

Investment Monitoring: Your IC or CAP Agreement defines the investment monitoring performed as part of your respective investment advisory program. If we have included assets held in UBS brokerage accounts, it is important that you understand that we do not act as an investment adviser or fiduciary on brokerage assets. We do not monitor brokerage account investments through the IC or CAP Programs and we do not monitor investments as a brokerage service unless specifically agreed to in writing. This report is provided solely to help you evaluate your account performance and/or progress toward your financial objectives. By providing this report to you, we are not agreeing to monitor any brokerage account investments contained within the report. If you want ongoing monitoring of your brokerage investments, please speak with your financial advisor about the possibility of including such investments as part of an investment advisory relationship with us. Inclusion of brokerage assets in this report also distorts the actual performance of your advisory assets.

Valuation: Values shown are not inclusive of margin balances. Every reasonable effort has been made to accurately price securities; however, we make no guarantee with respect to any security's price. To determine the value of securities in your account, we generally rely on third party quotation services. If a price is unavailable or believed to be unreliable, we may determine the price in good faith and may use other sources such as the last recorded transaction. We will generally rely on the value provided by you, the custodian or issuer of that security, when (i) securities are held at another custodian; (ii) investments not available through UBS or that our systems do not recognize. To obtain current quotations, when available, contact your Institutional Consultant or Financial Advisor. Such pricing may impact the performance information provided in these reports. If pricing is indicated as "NA", the required data for that field was not provided by the other financial institution or you; this will impact the performance information provided in these reports.

Performance Analytics: Unless otherwise noted, performance shown is based on Time Weighted Rate of Return. Periods greater than one year have been annualized, but annual performance may not represent a full calendar year depending on the inception date of the first account included in these reports. Standard deviations are shown only for periods of 12 months or longer. When you hold your assets at UBS, this report will generally show performance net of manager and UBS Institutional Consulting fees, unless you and your UBS Financial Advisor decided to reflect fee information differently. If you hold your assets away from UBS, this report will generally show performance net of manager and UBS Institutional Consulting fees if your custodian provides that level of fee information, unless you and your UBS Financial Advisor decided to reflect fee information differently. Therefore, this report may reflect performance before the deduction of manager fees and/or UBS Institutional Consulting advisory fees. The payment of fees and expenses will reduce the performance of the account and the reduction in performance will have a cumulative effect over time. The net effect of the payment of fees on the annualized performance, and the compounded or cumulative effect over time, is dependent on the amount of the fee and the account's investment performance. For example, an account that experiences an annual gross performance of 10% but incurs a 2.8% annual fee that is deducted quarterly on a prorated basis, will experience net annual performance of 7.1%, a reduction of 2.9% per year. Compounding will similarly affect the account's performance on a cumulative basis.

Performance information incorporates data as of the date your accounts became available for these reports, not as of your initial acquisition of a particular investment unless performance history is imported at client's instruction. For reports that reflect combined account information, the inception date will be the earliest performance start date of any of the individual accounts selected for the consolidation time period. If an individual account's performance information is not available for a full reporting time period (month to date, quarter to date, year to date or performance to date), that account's information will only be included for the period when available. For consolidated accounts that include different account inception dates, the consolidated Additions/Withdrawals, Income Earned and Investment Appreciation/ Depreciation will include all activity that occurred during the consolidated reporting time period. The inception date of each account is listed at the beginning of this report. Accounts that hold or held insurance products will be reported on from the month end date of when insurance and annuity activity could be obtained from the carrier. To the extent that your historical data contains a mixture of net and gross performance history related to manager or advisory fees, those distinctions will impact your performance reports to the extent that the different methods of reporting are blended. Note that various factors, including unpriced securities and certain holdings, adjustments or activity may cause the results shown in this report to differ from actual performance (see the Performance Reconciliation Adjustments section for detail on differences between your Custodial statement and information used to create this performance report). Note that these results may differ from other performance reports provided to you by UBS. Performance information may be impacted by the different ways each UBS entity or third party financial institution respectively records trade executions. Past performance is no guarantee of future results. Neither the UBS entities nor any of their respective representatives provide tax or legal advice. You must consult with your legal or tax advisors regarding your personal circumstances.

You have discussed the receipt of this individually customized report with your Financial Advisor. Your UBS account statements and trade confirmation are the official records of your accounts at UBS. We assign index benchmarks to our asset allocations, strategies in our separately managed accounts and discretionary programs based on our understanding of the allocation, strategy, the investment style and our

research. The benchmarks included in this report can differ from those assigned through our research process. As a result, you may find that the performance comparisons may differ, sometimes significantly, from that presented in performance reports and other materials that are prepared and delivered centrally by the Firm. Depending upon the composition of your portfolio and your investment objectives, the indexes used in this report may not be an appropriate measure for comparison purposes, and as such, are represented for illustration only. Your portfolio holdings and performance may vary significantly from the index. Your financial advisor can provide additional information about how benchmarks within this report were selected.

Using Margin in your IC or CAP Investment Advisory Accounts. Using margin in an advisory account is a more aggressive, higher risk approach to pursuing your investment objectives. Unless you have selected a strategy that requires the use of margin as part of its implementation, we do not recommend the use of margin in advisory accounts, including IC and CAP accounts. The decision to leverage in an advisory account rests solely with you and is made against our recommendation. Your decision should be made only if you understand: (1) the risks of margin in an advisory account; (2) how margin may affect your ability to achieve investment objectives; (3) that you may lose more than your original investment. You will pay interest to UBS on the outstanding margin loan balance. Using margin to purchase securities in an advisory account increases the amount of (but not the percentage of) the advisory fee you pay. Positive or negative performance of a margined advisory account will be magnified by virtue of using margin. You will not benefit from using margin in an advisory account if the performance of your account does not exceed the interest expense being charged on the loan plus the additional advisory account fees incurred by your account as a result of the deposit of the loan proceeds.

Using Advisory Accounts as collateral for a credit line. If you currently have UBS Bank USA Credit Line collateralized by advisory accounts, UBS Bank USA pays UBS Financial Services a servicing fee based on the amount of outstanding loan balances to compensate UBS for referring clients and for administrative and operational support relating to the loan. If you maintain a balance on a non-purpose loan, your Financial Advisor will receive compensation primarily based upon the outstanding balance and the corresponding spread on the loan. This provides an incentive for your Financial Advisor to refer you for a non-purpose loan and to draw down on the loan. As UBS and your Financial Advisor are compensated primarily through advisory fees paid on your account, we (and your Financial Advisor) benefit if you draw down on your loan to meet liquidity needs rather than sell securities or other investments in your UBS account, which would reduce our advisory fee. A draw down would preserve your Financial Advisor's advisory fee revenue and may generate additional loan-related compensation for him. This presents a potential conflict of interest for your Financial Advisor when addressing your needs for liquidity. Please consider your options and these conflicts of interest carefully when deciding whether to liquidate assets or draw down on a non-purpose loan.

UBS Financial Services Inc. is in the business of establishing and maintaining investment accounts and we will receive compensation from you in connection with investments that you make, as well as additional compensation from third parties whose investments we distribute. This presents a conflict of interest when we recommend that you move your assets to UBS from another financial institution, and also when we make investment recommendations for assets you hold at, or purchase through, UBS. For more information on how we are compensated by clients and third parties, conflicts of interest and investments available at UBS please refer to the 'Your relationship with UBS' booklet provided at ubs.com/relationshipwithubs, or ask your UBS Financial Advisor for a copy. Neither UBS, our affiliates nor our Financial Advisors will act as investment adviser to you with respect to the liquidation of securities held in an advisory account to meet a margin call or credit line loan demand

Benchmark Index Information: For comparison purposes, these reports may contain a number of general broad market indices, which were selected to demonstrate the performance of broad market indicators that are readily recognized, rather than for direct performance comparisons, and do not reflect the performance of actual investments. The selection and use of benchmarks is not a promise or guarantee that your accounts will meet or exceed the stated benchmarks. Benchmark information is illustrative and relates to historical performance of market indexes and not the performance of actual investments. Indexes are not available for direct investment and reflect an unmanaged universe of securities. Indices assume no management, custody, transaction fees or expenses that would lower the performance results, and assume reinvestment of dividends and capital gains. Information about indices is based on information obtained from sources believed to be reliable, but no independent verification has been made. UBS does not guarantee the accuracy or completeness of any index information presented. Market index data is subject to review and revision, and UBS reserves the right to substitute indices or display only those indices for which current updated information is available. Information regarding the indexes shown in this report can be found at the end of this report.

Risk Considerations: Some of the general risk considerations associated with the investment options included in this report are described below. The descriptions are not meant to be a complete list of all investment risks. For more complete information regarding fees, expenses, risks and restrictions associated with these investments please review the offering documents and marketing materials. Investors should consult their tax advisor about their specific tax situation before investing in any securities. In addition, clients should familiarize themselves with the particular market risks and the other risks associated with the specific investment. All investments contain risk and may lose value.

Cash and cash alternatives: Cash and cash alternatives typically include money market securities or three-month T-Bills. These securities have short maturity dates and they typically provide a stable investment value as compared to other investments and current interest income. These investments may be subject to credit risks and inflation risks. Treasuries also carry liquidity risks for sales prior to maturity. Investments in money market funds are neither insured nor guaranteed by the Federal Deposit Insurance Corporation ("FDIC"), the U.S. government or any other government agency. There can be no assurance that the funds will be able to maintain a stable net asset value at \$1.00 per share or unit.

Alternative Investments: Non-traditional asset classes are alternative investments that include hedge funds, private equity, and private real estate (collectively, non-traditional or alternative investments). These investments can be subject to substantial risks (including the risks associated with limited liquidity, the use of leverage, short-sales and concentrated positions), may involve complex tax structures and strategies, and may not be easily valued. The risks of alternative investments should be carefully considered in light of your investment objectives, risk tolerance and net worth. Alternative investments are speculative and entail substantial risks, which may place your capital at risk. Alternative investments may not have been registered with the Securities and Exchange Commission or under any state securities laws. The market for such investments may be highly illiquid and subjectively valued, and these reports provide values for informational purposes only. Accuracy is not guaranteed. These values may differ substantially from prices, if any, at which a unit may be bought or sold and do not necessarily represent the value you would receive from the issuer upon liquidation. Issuer estimated values, if any, are generally updated on a regular (annual or semi-annual) basis and are supplied to us by the issuer, but may be calculated based on different information from what is used by third parties to derive their estimated values.

U.S. Fixed Income: Fixed income represents exposure (whether direct or indirect) to debt issued by private corporations, governments or federal agencies. Historically, fixed income has higher return than cash investments but their value can fluctuate dramatically as they are subject to risks including market, interest rate, issuer, credit, default and inflation risk. An investment in a portfolio may be worth more or less than its original cost when redeemed. In addition, fixed income generally has less volatility and long-term return than equities. U.S. fixed income may be further classified as high yield. These investments are high yielding but may also carry more risk. A bond funds yield and value of its portfolio fluctuate and can be affected by changes in interest rates, general market conditions and other political, social and economic developments.

U.S. Equity: Equities represent exposure (whether direct or indirect) to ownership interest in a corporation. Historically, equities are more risky than fixed income or cash investments as they experience greater volatility risk, which is the risk that the value of your investment may fluctuate over time. However, they have had higher returns. Investments in small and medium company stocks can be more volatile over the short term than investments in large company stocks, however, they may offer greater potential for appreciation.

Non-U.S. equity and fixed income: Non-U.S. equity and fixed income represent exposure (whether direct or indirect) to ownership interests and debt, respectively, of foreign governments and corporations that can be sub-divided into those from countries that have developed markets or emerging markets. Further, non-U.S. companies not reporting with the SEC may be subject to accounting, auditing, and financial reporting standards and requirements that differ from companies reporting with the SEC and may have less publicly available information about them than companies reporting with the SEC.

International: Investors in securities of issuers located outside of the United States should be aware that even for securities denominated in U.S. dollars, changes in the exchange rate between the U.S. dollar and the issues "home" currency can have unexpected effects on the market value and liquidity of those securities. Those securities may also be affected by other risks (such as political, economic or regulatory changes) that may not be readily known to a U.S. investor.

Variable Annuities: A variable deferred annuity is a long-term financial product designed for retirement purposes. It is a contractual agreement in which payment(s) are made to an insurance company, which agrees to pay out an income or a lump sum amount at a later date. There are fees and charges associated with a variable annuity contract, which include, but are not limited to, operations charges, sales and surrender charges, administrative fees, and additional charges for optional benefits. Variable annuities are sold by prospectus and you should carefully consider important information on the sub-accounts' investment objectives, risk, charges and expenses.

Please read the prospectus and offering documents carefully before you invest. Your Financial Advisor can provide a copy of the prospectus. For current month-end returns:

<http://advisor.morningstar.com/familyinfo.asp> <<http://advisor.morningstar.com/familyinfo.asp>> <<http://advisor.morningstar.com/familyinfo.asp>> <<http://advisor.morningstar.com/familyinfo.asp>> Withdrawals from an annuity contract are taxable as ordinary income, not as capital gains and, if made prior to age 59 and 1/2, may be subject to an additional 10% federal income tax penalty. Withdrawals may also be subject to surrender charges. Withdrawals will reduce the death benefit, living benefits and cash surrender value. For tax purposes, withdrawals will come from any gain in the contract first. Please see the prospectus for complete details. Amounts in the annuity's variable investment portfolios are subject to fluctuation in value and market risk, including loss of principal. Unregistered group variable annuities and registered group variable annuities that are solely available for use in qualified plans are rated and ranked based on their position within the bell curve of the open end fund peer group (a.k.a. category), rather than the variable annuity subaccount peer group. These ratings and ranks are calculated by using an overlay of the open end fund peer group break points and therefore do not contribute to the category average or number of funds within the peer group. For variable annuity subaccounts, standardized return is total return based on its inception date within the separate account and is adjusted to reflect recurring and non-recurring charges such as surrender fees, contract charges, maximum front-end load, maximum deferred load, maximum M&E risk charge, administration fees, and actual ongoing fund-level expenses. The benchmark used for each individual subaccount performance is an index that has been assigned to the particular manager or fund.

Mutual Fund Performance Information: Mutual Funds are sold by prospectus and you should carefully consider important information on the fund's investment objectives, risk, charges and expenses. Please read the prospectus and offering documents carefully before you invest. Your UBS Institutional Consultant can provide a copy of the prospectus. For current month-end returns: <<http://advisor.morningstar.com/familyinfo.asp>> <<http://advisor.morningstar.com/familyinfo.asp>> <<http://advisor.morningstar.com/familyinfo.asp>> This analysis may incorporate mutual fund and exchange traded fund performance results. Analytics shown are calculated based on the fund's Net Asset Value, which may reflect the reinvestment of dividends and capital gains, as well as the deduction of 12b-1 fees and fund internal expenses (e.g. fund management fees). The analytics do not reflect the deduction of the sales load, where applicable, the UBS Consulting fee(s), where applicable, or the impact of taxes. Had the sales load, fee or taxes been included, the results used in this analysis would have been reduced.

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Ranking Methodology: Universe ranking assigns a whole number rank between 1 and 99 for a set of values. This is the distribution. Ranking is determined by comparing a value to the values in the set, and using the rank assigned to the value that is equal to or 'better' than the value being compared. A 'better' value is based on whether a higher value is better or a lower value is better. A set of values can be ranked either high to low (as in rates of return, where a higher value is better than a lower value) or low to high (such as Beta). **Policy Index:** A point of reference for evaluating a portfolio's investment performance. A policy Index can be comprised of single or multiple benchmarks (weighted blend). Portfolios with multiple benchmarks will be depicted with a description of benchmarks and weights that comprise the policy. **The benchmarks that constitute the policy index change over time as your portfolio changes. For historical policy index information, see the Benchmark Comparisons Used in this Report exhibit.**

Gain/(Loss) Information: When data is available from UBS, estimated unrealized gains/losses are calculated for individual security lots. For assets transferred from another financial institution, gain/loss information will be reflected only for the period of time the assets have been held at UBS entities. For assets held at other financial institutions, information provided by you or that entity, if any, is reflected. Total realized gain/loss information may include calculations based upon non-UBS entities cost basis information. UBS Financial Services Inc. does not independently verify or guarantee the accuracy or validity of any information provided by sources other than UBS Financial Services Inc. When original cost information is unavailable, gain/loss amounts will represent current market value and total gains/losses may be inaccurate. Date information for when a particular security was acquired, when available, appears on these reports. When no acquisition date is provided for a security, these reports reflect "N/A" and omit this information. As a result, these figures may not be accurate and are provided for informational purposes only.

Interest and Dividend Income: When shown on this report, information does not reflect your account's tax status or reporting requirements. You should use only official IRS forms for tax reporting purposes. The classification of private investment distributions can only be determined by referring to the official year-end tax-reporting document provided by the issuer.

Contributions and Withdrawals: When shown on a report, information regarding contributions and withdrawals may represent the net value of all cash and securities contributions and withdrawals, and may include program fees (including wrap fees) and other fees added to or subtracted from your accounts from the first day to the last day of the period covered by these reports. Program fees may be separately identified or included in withdrawals except when paid via an invoice or through a separate account billing arrangement.

Cash Flow: Cash Flow analysis is based on the historical dividend, coupon and interest payments you have received as of the Record Date in connection with the securities listed and assumes that you will continue to hold the securities for the periods for which cash flows are projected. This may or may not include principal paybacks for the securities listed. These potential cash flows are subject to change due to a variety of reasons, including but not limited to, contractual provisions, changes in corporate policies, changes in the value of the underlying securities and interest rate fluctuations. The effect of a call on any security(s) and the consequential impact on its potential cash flow(s) is not reflected in this report. Payments that occur in the same month in which the report is generated -- but prior to the report run ("As of") date -- are not reflected in this report. In determining the potential cash flows, UBS relies on information obtained from third party services it believes to be reliable but does not independently verify or guarantee the accuracy or validity of any information provided by third parties. Cash flows for mortgage-backed, asset-backed, factored, and other pass-through securities are based on the assumptions that the current face amount, principal pay-down, interest payment and payment frequency remain constant.

Calculations may include principal payments, are intended to be an estimate of future projected interest cash flows and do not in any way guarantee accuracy.

Important information about advisory & brokerage services: As a firm providing wealth management services to clients, UBS Financial Services Inc. offers investment advisory services in its capacity as an SEC-registered investment adviser and brokerage services in its capacity as an SEC-registered broker-dealer. Investment advisory services and brokerage services are separate and distinct, differ in material ways and are governed by different laws and separate arrangements. It is important that clients understand the ways in which we conduct business and that they carefully read the agreements and disclosures that we provide to them about the products or services we offer. A small number of our financial advisors are not permitted to offer advisory services to you, and can only work with you directly as UBS broker-dealer representatives. Your financial advisor will let you know if this is the case and, if you desire advisory services, will be happy to refer you to another financial advisor who can help you. Our agreements and disclosures will inform you about whether we and our financial advisors are acting in our capacity as an investment adviser or broker-dealer. For more information, please review the PDF document at ubs.com/relationshipsummary. While we strive to make sure the nature of our services is clear in the materials we publish, if at any time you would like clarification on the nature of your accounts or the services you are receiving, please speak with your UBS Institutional Consultant. The ACCESS, SWP, AAP, MAC and Institutional Consulting ("IC") programs offer some of the same Separately Manage Account ("SMA") Managers for different SMA Manager fees. The amount of the fee paid to each SMA Manager is a function of that SMA Manager's investment style and the fee negotiated with the SMA Manager either by UBS (in ACCESS, SWP) or by you (in MAC or IC). Depending on your asset level and ability to negotiate the investment management fee with the SMA Manager in the dual-contract structure of the MAC or IC program, you may find that the single-contract structure in ACCESS and SWP provides a more cost-effective option or vice versa. In addition, based on the combination of our fees and your SMA Manager's fees, the overall fee for your SMA account in ACCESS, SWP, MAC or IC may exceed 3% of the account value. Please review your options and overall costs carefully with your Financial Advisor before investing

Calculation Definitions

Accrued Interest: In accounting, accrued interest refers to the amount of interest that has been incurred, as of a specific date, on a loan or other financial obligation but has not yet been paid out. Accrued interest can either be in the form of accrued interest revenue, for the lender, or accrued interest expense, for the borrower. The term accrued interest can also refer to the amount of bond interest that has accumulated since the last time a bond interest payment was made.

Alpha: Alpha measures the difference between an investment's actual performance, and its expected performance as indicated by the returns of a selected market index. A positive Alpha indicates the risk-adjusted performance is above that index. In calculating Alpha, Standard Deviation (total risk) is used as risk measure. Alpha is often used to judge the value added or subtracted by a manager.

Annual Income is money (or some equivalent value) that an individual or business receives, usually in exchange for providing a good or service or through investing capital. Income is used to fund day-to-day expenditures. Investments, pensions, and Social Security are primary sources of income for retirees. For individuals, income is most often received in the form of wages or salary. Business income can refer to a company's remaining revenues after paying all expenses and taxes. In this case, income is referred to as "earnings." Most forms of income are subject to taxation.

Appreciation/Depreciation: Appreciation or Depreciation is the change in market value minus net cash flows. The value indicates by how much the portfolio value has changed due to changes in asset values. Appreciation would be an increase, Depreciation would be a decrease.

Average Exposure: Average Exposure is generally, the average allocation to a segment or an asset. Calculated as the beginning market value plus the weighted net cash flows as a percentage of the total portfolio market value.

Beta: Beta is defined as a Manager's sensitivity to market movements and is used to evaluate market related, or systematic risk. Beta is a measure of the linear relationship, over time, of the Manager's returns and those of the Benchmark. Beta is computed by regressing the Manager's excess returns over the risk free rate (cash proxy) against the excess returns of the Benchmark over the risk free rate. An investment that is as equally volatile as the market will have a Beta of 1.0; an investment half as volatile as the market will have a Beta of 0.5; and so on. Thus, Betas higher than 1.0 indicate that the fund is more volatile than the market.

Composite Benchmark: The Composite Benchmark is a weighted average benchmark based on the allocation of funds within each of the portfolios in the composite and the risk index assigned to each portfolio.

Correlation (R): The Correlation represents the degree to which investments move in tandem with one another and is a critical component of diversified portfolio construction. The Correlation varies between a minimum of -1 (move in opposite direction) and a maximum of 1 (completely correlated). Lower Correlations enhance diversification and lead to better risk-adjusted returns within diversified portfolios. An R of less than 0.3 is often considered low Correlation.

Cost: This is the Cost basis information. Cost basis is the original value of an asset for tax purposes, usually the purchase price, adjusted for stock splits, dividends, and return of capital distributions. This value is used to determine the capital gain, which is equal to the difference between the asset's cost basis and the current market value.

Coupon Rate: A coupon rate is the yield paid by a fixed-income security; a fixed-income security's coupon rate is the annual coupon payments paid by the issuer relative to the bond's face or par value. The coupon rate, or coupon payment, is the yield the bond paid on its issue date. This yield changes as the value of the bond changes, thus giving the bond's **Yield to Maturity**. The portfolio's coupon rate is the weighted average of the assets' coupon rates.

Current Yield: This measure looks at the current price of a bond instead of its face value and represents the return an investor would expect if he or she purchased the bond and held it for a year. This measure is not an accurate reflection of the actual return that an investor will receive in all cases because bond and stock prices are constantly changing due to market factors.

Distribution of Excess Returns: Distribution of Excess Returns displays an arrangement of statistical data that exhibits the frequency of occurrence of the investment's returns in excess of the selected Market Index.

Distribution of Assets: Distribution of Assets displays monthly data related to net contributions, market values, rates of return, and Index Values.

Down Market (Mkt) Capture Ratio: Down Market Capture Ratio is a measure of an investment's performance in down markets relative to the market itself. A down market is one in which the market's return is less than zero. The lower the investment's Down Market Capture Ratio, the better the investment protected capital during a market decline. A negative Down Market Capture Ratio indicates that an investment's returns rose while the market declined.

Downside Capture Return: The downside capture return is the cumulative performance of the portfolio in all periods during which the risk benchmark posted a negative return.

Downside Probability: The downside probability is the ratio of the number of periods during which the portfolio posted a negative return to the total number of periods under study. If, for example, during a 12 month span, the portfolio realized 5 months of negative returns, the downside probability would be equal to 5/12 or 42 percent. The sum of the downside and upside probabilities must equal 1.0. The downside probability does not consider the extent to which the portfolio will fail to exceed the target index. It merely considers the likelihood that the target will not be exceeded. It is important to bear in mind this point when comparing the downside probabilities of more than one portfolio. It is not necessarily correct, for example, to deem portfolio A riskier than portfolio B simply because A has a higher downside probability.

Downside Risk (Semi Standard Deviation, Semi Std Dev, or Downside Deviation): Downside Risk only identifies volatility on the down side. Downside Risk measures the variability of returns below zero, whereas Standard Deviation attributes volatility in either direction to risk. The Downside Risk method calculates the deviations below zero for each observed return. Each time a return falls below zero, the sum is divided by the number of observations and the square root is taken. This result is then shown on an annualized basis.

Dynamic Index: A weighted average blended benchmark of the risk indices assigned to each asset class, based on the asset allocation of the portfolio for a given period. The benchmark index weighting adjusts with changes to the asset allocation. A Dynamic Index should not be used when measuring against the client's *Investment Policy Statement*.

Effective Duration: A duration calculation for bonds with embedded options. Effective duration takes into account that expected cash flows will fluctuate as interest rates change.

Excess: Denotes that a statistic is being measured relative to the Market Index selected. The data set analyzed consists of the periodic differences between the investment's measure and the selected Market Index's definition. **Expense Ratio:** Often referred to as the Net Expense Ratio, Morningstar pulls the net annual expense ratio from the fund's audited annual report. Annual-report expense ratios reflect the actual fees charged during a particular fiscal year. The annual report expense ratio for a fund of funds is the wrap or sponsor fee only. The expense ratio expresses the percentage of assets deducted each fiscal year for fund expenses, including 12b-1 fees, management fees, administrative fees, operating costs, and all other asset-based costs incurred by the fund. Portfolio transaction fees, or brokerage costs, as well as initial or deferred sales charges are not included in the expense ratio. The expense ratio, which is deducted from the fund's average net assets, is accrued on a daily basis. If the fund's assets are small, its expense ratio can be quite high because the fund must meet its expenses from a restricted asset base. Conversely, as the net assets of the fund grow, the expense percentage should ideally diminish as expenses are spread across the wider base. Funds may also opt to waive all or a portion of the expenses that make up their overall expense ratio.

Gross Dollar Weighted Return: Gross Dollar Weighted Return is the internal rate of return, excluding money manager fees.

Gross Expense Ratio: Represents the total gross expenses (net expenses with waivers added back in) divided by the fund's average net assets. If it is not equal to the net expense ratio, the gross expense ratio portrays the fund's expenses had the fund not waived a portion, or all, of its fees. Thus, to some degree, it is an indication of fee contracts. Some fee waivers have an expiration date; other waivers are in place indefinitely.

Gross Time Weighted Return: Gross Time Weighted Return is the Modified Dietz return, excluding money manager fees.

Index Value: Index Value is the unit value series based on the return stream. It can be used to calculate rates of return between any two dates in the report.

Information Ratio: The Information Ratio is a measure of value added by an investment manager. It is the ratio of (annualized) excess return above the selected Market Index to (annualized) Tracking Error. Excess return is calculated by linking the difference of the manager's return for each period minus the selected Market Index return for each period, then annualizing the result.

Investment Class: Group of financial instruments which have similar financial characteristics and which tend to behave similarly in the marketplace.

Investment Style: Method and philosophy followed by a manager when selecting financial instruments.

Management Firm: Professional organization managing various assets in order to meet specified investment goals for the benefit of its clients.

Manager Capture Ratio: The Manager Capture Ratio is manager return divided by the selected Market Index return. It shows what portion of the market performance was captured by the manager under certain market conditions: up market, down market, or both.

Market Experience: Market Experience is the presumable market value of the portfolio if it and its cash flows had grown at the policy index rate of return. It lets the reader know if active management has aided or hurt the portfolio.

Maturity Date: The maturity date is the date on which the principal amount of a note, draft, acceptance bond or other debt instrument becomes due. On this date, which is generally printed on the certificate of the instrument in question, the principal investment is repaid to the investor, while the interest payments that were regularly paid out during the life of the bond, cease to roll in. The maturity date also refers to the termination date (due date) on which an installment loan must be paid back in full.

Net Cash Flow: For the total portfolio, net cash flow is aggregate contributions minus aggregate withdrawals. At the asset class level, net cash flow is aggregate purchases minus aggregate sales minus aggregate income. It is used in the numerator of the Modified Dietz return calculation. It is the same as "New Money" and "Flow".

Net Dollar Weighted Return: Net Dollar Weighted Returns is the internal rate of return, including money manager fees.

Net Time Weighted Return: Net Time Weighted Return is the Modified Dietz return, including money manager fees.

New Money: For the total portfolio, New Money is aggregate contributions minus aggregate withdrawals. At the asset class level, New Money is aggregate purchases minus aggregate sales minus aggregate income. It is used in the numerator of the Modified Dietz return calculation. It is the same as "Net Cash Flow" and "Flow".

Par value: Par value is the face value of a bond. The market price of a bond may be above or below par, depending on factors such as the level of interest rates and the bond's credit status. Par value for a bond is typically \$1,000 or \$100 because these are the usual denominations in which they are issued.

Performance Attribution: Attribution analysis is a sophisticated method for evaluating the performance of a portfolio or fund manager. Manager Contribution focuses on three factors: the manager's investment style, their specific asset selections, and the market timing of those selections. It attempts to provide a quantitative analysis of the aspects of a fund manager's investment selections and philosophy that lead to that fund's performance. Asset Allocation provides an analysis of the effects on relative performance (i.e., performance vs. an index) that are related to a portfolio's allocation between asset classes. Total Fund Attribution combines the Manager Contribution results with the impacts of Asset Allocation decisions.

Real rate of return is the annual percentage of profit earned on an investment, adjusted for inflation. Therefore, the real rate of return accurately indicates the actual purchasing power of a given amount of money over time. Adjusting the nominal return to compensate for inflation allows the investor to determine how much of a nominal return is real return. In addition to adjusting for inflation, investors also must consider the impact of other factors such as taxes and investing fees in order to calculate real returns on their money or to choose among various investing options.

Tracking error is the divergence between the price behavior of a position or a portfolio and the price behavior of a benchmark. This is often in the context of a hedge fund, mutual fund, or exchange-traded fund (ETF) that did not work as effectively as intended, creating an unexpected profit or loss. Tracking error is reported as a standard deviation percentage difference, which reports the difference between the return an investor receives and that of the benchmark they were attempting to imitate.

Treynor ratio, also known as the reward-to-volatility ratio, is a performance metric for determining how much excess return was generated for each unit of risk taken on by a portfolio. Excess return in this sense refers to the return earned above the return that could have been earned in a risk-free investment. Although there is no true risk-free investment, treasury bills are often used to represent the risk-free return in the Treynor ratio. Risk in the Treynor ratio refers to systematic risk as measured by a portfolio's beta. Beta measures the tendency of a portfolio's return to change in response to changes in return for the overall market.

Upside market Capture ratio: The Upside Capture Ratio is the ratio of the Upside Capture Return -of a portfolio against a benchmark index- divided by the Market Benchmark Index's return (from zero or positive returns).

Upside Capture Return; The Upside Capture Return, which is measured based a related benchmark index's returns, is the portfolio's compound return for returns in periods, in which the respective benchmark index's return is above or equal to zero.

Yield to maturity (YTM) is the total return anticipated on a bond if the bond is held until it matures. Yield to maturity is considered a long-term bond yield but is expressed as an annual rate. In other words, it is the internal rate of return (IRR) of an investment in a bond if the investor holds the bond until maturity, with all payments made as scheduled and reinvested at the same rate.

Policy Index: A point of reference for evaluating a portfolio's investment performance. A policy Index can be comprised of single or multiple benchmarks (weighted blend). Portfolios with multiple benchmarks will be depicted with a description of benchmarks and weights that comprise the policy.

Rate of Return, ROR, Return %, ROI: All Return terms refer to the Modified Dietz return.

Relative Risk: Relative risk is simply the ratio of the standard deviation of the portfolio to the standard deviation of the risk index. The statistic reveals how much of the variation of the risk index is "shared" by the portfolio. A relative risk of 1.0 indicates that the portfolio has the same level of return variability as the risk index. A relative risk of less than 1.0 indicates that the portfolio has shown a lower dispersion of returns than the index. A relative risk in excess of 1.0 indicates that the portfolio returns have been more dispersed than those of the index.

Riskless Index: The theoretical rate of return of an investment with zero risk. The risk-free rate represents the interest an investor would expect from an absolutely risk-free investment over a specified period of time. The 3 month T-Bill is the usual index used for riskless.

R-Squared (R2): The diversification measure R2 indicates the percentage of volatility in portfolio returns which can be "explained" by market volatility. This statistic indicates the degree to which the observed values of one variable, such as the returns of a managed portfolio, can be explained by, or are associated with the values of another variable, such as a Market Index. It is especially helpful in assessing how likely it is that Alpha and Beta are statistically significant. The R2 values generally range from 0.0 to 1.0. An investment with an R2 of 1.0 is perfectly correlated with the market whereas an investment with an R2 of 0.0 will behave independently of the market. An R2 of 0.95, for example, implies that 95% of the fluctuations in a portfolio are explained by fluctuations in the market.

Sector Allocations: The percentage a manager has allocated to specific economic sectors.

Sharpe Ratio: The Sharpe Ratio indicates the excess return per unit of total risk as measured by Standard Deviation. It is a ratio of the arithmetic average of excess returns over the risk free rate to the Standard Deviation. The Sharpe Ratio is a measure of the premium earned for the risk incurred by the portfolio.

Sortino Ratio: The Sortino Ratio is a measure of reward per unit of risk. With Sortino, the numerator (i.e., reward) is defined as the incremental compounded average return over the minimum acceptable return (MAR). The denominator (i.e., risk) is defined as the downside deviation of the returns below the MAR. Since the downside deviation is the standard deviation of those returns which fail to exceed the MAR, the result of the Sortino Ratio is a measure of the average reward per unit of loss. As with Sharpe and Treynor, the Sortino Ratio only has value when it is used as the basis of comparison between portfolios. The higher the Sortino Ratio, the better.

Standard Deviation: A measure of the extent to which observations in a series vary from the arithmetic mean of the series. The Standard Deviation of a series of asset returns is a measure of volatility or risk of the asset.

Target Allocation: The Target Allocation is the allocation goal of the portfolio approaches and long- and short-term holding periods.

HFRI Relative Value: Equally weighted index of investment managers who maintain positions in which the investment thesis is predicated on realization of a valuation discrepancy in the relationship between multiple securities. Managers employ a variety of fundamental and quantitative techniques to establish investment theses, and security types range broadly across equity, fixed income, derivative or other security types.

Unit Values: Unit Value links periodic rates of return, beginning with an initial value of 100. It can be used to calculate rates of return between any two dates in the report.

Index Definitions

JP Morgan Global Ex-U.S. Bond Index: Consists of regularly traded, fixed-rate domestic government debt instruments from 12 international bond markets. Countries included are Austria, Belgium, Canada, Denmark, France, Germany, Italy, Japan, the Netherlands, Spain, Sweden and the United Kingdom.

MSCI AC World Index ex USA: Consists of approximately 2,000 securities across 47 markets, with emerging markets representing approximately 18%. MSCI attempts to capture approximately 85% of the market capitalization in each country.

MSCI EAFE Index (Europe, Australasia, Far East): A free float-adjusted market capitalization index that is designed to measure the equity market performance of developed markets, excluding the U.S. and Canada. As of June 2007, the MSCI EAFE Index consisted of the following 21 developed market country indexes: Australia, Austria, Belgium, Denmark, Finland, France, Germany, Greece, Hong Kong, Ireland, Italy, Japan, the Netherlands, New Zealand, Norway, Portugal, Singapore, Spain, Sweden, Switzerland and the United Kingdom.

MSCI Emerging Markets Index: A free float-adjusted market capitalization index that is designed to measure equity market performance of emerging markets. As of November 2008, the MSCI Emerging Markets Index consisted of the following 24 emerging market country indexes: Argentina, Brazil, Chile, China, Colombia, Czech Republic, Egypt, Hungary, India, Indonesia, Israel, Korea, Malaysia, Mexico, Morocco, Pakistan, Peru, Philippines, Poland, Russia, South Africa, Taiwan, Thailand and Turkey.

MSCI Europe Index: A free float-adjusted market capitalization-weighted index that is designed to measure the equity market performance of the developed markets in Europe. As of June 2007, the MSCI Europe Index consisted of the following 16 developed market country indexes: Austria, Belgium, Denmark, Finland, France, Germany, Greece, Ireland, Italy, the Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and the United Kingdom.

MSCI Japan Index: A free float-adjusted market capitalization-weighted index that is designed to measure the equity market performance of Japan.

NAREIT Index: Benchmarks the performance of the REIT industry since its inception in 1972. It was designed to provide a comprehensive assessment of overall industry performance. Some REITs available from over-the-counter markets are not included due to the lack of real-time pricing.

NCREIF Property Index (NPI): A quarterly time series composite total rate of return measure of investment performance of a large pool of individual commercial real estate properties acquired in the private market for investment purposes only. All properties in the NPI have been acquired, at least in part, on behalf of tax-exempt institutional investors - the great majority being pension funds. As such, all properties are held in a fiduciary environment.

Russell 1000® Index: Measures the performance of the large-cap segment of the U.S. equity universe. It is a subset of the Russell 3000® Index and includes approximately 1000 of the largest securities based on a combination of their market cap and current index membership. The Russell 1000 represents approximately 92% of the U.S. market.

Russell 1000® Growth Index: Measures the performance of the large-cap growth segment of the U.S. equity universe. It includes those Russell 1000 companies with higher price-to-book ratios and higher forecasted growth values.

Russell 1000® Value Index: Measures the performance of the large-cap value segment of the U.S. equity universe. It includes those Russell 1000 companies with lower price-to-book ratios and lower expected growth values. **Russell 2000® Growth Index:** Measures the performance of the small-cap growth segment of the U.S. equity universe. It includes those Russell 2000 companies with higher price-to-book ratios and higher forecasted growth values.

Russell 2000® Value Index: Measures the performance of the small-cap value segment of the U.S. equity universe. It includes those Russell 2000 companies with lower price-to-book ratios and lower forecasted growth values.

Russell Mid-Cap® Growth Index: Measures the performance of the mid-cap growth segment of the U.S. equity universe. It includes those Russell mid-cap companies with higher price-to-book ratios and higher forecasted growth values.

Russell Mid-Cap® Value Index: Measures the performance of the mid-cap value segment of the U.S. equity universe. It includes those Russell mid-cap companies with lower price-to-book ratios and lower forecasted growth values.

S&P 500 Index: Covers 500 large cap industrial, utility, transportation, and financial companies of the US markets. The index represents about 75% of NYSE market capitalization and 30% of NYSE issues. It is a capitalization weighted index calculated on a total return basis with dividends reinvested.

TASS Index of CTAs: Is a dollar-weighted index based on historical managed futures performance of CTAs with established track records.

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http://www.ftse.com/About_Us/Legal/Attribution_Requirements.jsp

City of Columbia, MO Police & Fire Pension
July 31, 2024

Accounts Included in this Report

UBS account statements represent the only official record of holdings, balances, transactions and security values of assets in your UBS Financial Services Inc. account and are not replaced, amended or superseded by any information presented in this report. As an accommodation to you, values of accounts that you hold at other financial institutions may be included as part of your UBS IC Consulting Services Agreement based on information, including pricing information, provided to us. This report does not include assets held in your UBS account(s) that are not a part of the Institutional Consulting program unless you have requested that those accounts be included in this report. UBS does not independently verify or guarantee the accuracy or validity of any information provided by sources other than UBS Financial Services Inc. Please see the 'Important Information' section at the end of this report for detailed pricing information.

Account Name	Account Number	Custodian Name
DSAM Core Plus	PTxxx10	UBS Financial Services
Blackstone Private Credit	ptxxx27	UBS Financial Services
Blue Owl Technology	ptxxx28	UBS Financial Services
BREIT	ptxxx26	UBS Financial Services
Canyon Partners Distressed Debt	PTxxx64	UBS Financial Services
Vanguard Long-Term CB	PTxxx83	UBS Financial Services
JP Morgan High Yield	PTxxx77	UBS Financial Services
Metlife STAMP 1-5	PTxxx12	UBS Financial Services
MFS Large Value	PTxxx67	UBS Financial Services
Capital Group Intl	PTxxx16	UBS Financial Services
Delaware Intl Val	PTxxx70	UBS Financial Services
Kayne Anderson Small Cap Core	PTxxx84	UBS Financial Services
Eagle Mid Growth	PTxxx46	UBS Financial Services
Goldman Sachs Mid Value	PTxxx73	UBS Financial Services
S&P 500 Index	PTxxx11	UBS Financial Services
Vanguard Growth	PTxxx35	UBS Financial Services
O'Shaughnessy LCV	PTxxx95	UBS Financial Services

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Performance Reconciliation Adjustments

This section provides a record of differences between information reported by your custodian and information used to create this performance report, whether at your direction or as prescribed by your Institutional Consultant on your behalf.

Scenario	Description	Net Adjustment (+/-)
	No differences in information were used in the creation of this performance report.	

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City of Columbia, MO Police & Fire Pension - Investments Not Reviewed by UBS

UBS does not conduct due diligence and has not otherwise reviewed the following investments or strategies, which are included in this report at your request. You have retained this investment or strategy without the assistance of UBS or any of its employees. The inclusion of these investments/strategies in this performance report does not constitute a recommendation by UBS that you continue to invest or add funds to the strategy.

UBS does not make initial or ongoing recommendations on this investment or manager strategy to existing or prospective clients.

The IC program offers a broad spectrum of investments and manager strategies that are researched by UBS and for which clients can receive investment advice and research. Your IC fee will not be offset or reduced as a result of not accessing our researched options.

At the time of report creation, all investments in your portfolio are reviewed.

Cash and Money Market Funds are not included in this analysis. UBS does not research any money market mutual funds, other than those offered by UBS and its affiliates.

This report is provided for informational purposes only. The information shown was obtained from sources believed to be reliable, the accuracy of which is not guaranteed. Account statements provided by UBS or other financial institutions are the official record of your holdings, balances, transactions and security values and are not amended or superseded by the information in this report. Information is current as of the date shown. Past performance is no guarantee of future returns. See IMPORTANT INFORMATION for assumptions and limitations of the analysis in this report, risk considerations, valuation, fees and other details regarding this report. For historical primary index information, see Benchmark Comparisons Used in this Report.

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Disclosures Applicable to Accounts at UBS Financial Services Inc.

This section contains important disclosures regarding the information and valuations presented here. All information presented is subject to change at any time and is provided only as of the date indicated. The information in this report is for informational purposes only and should not be relied upon as the basis of an investment or liquidation decision. UBS FS account statements and official tax documents are the only official record of your accounts and are not replaced, amended or superseded by any of the information presented in these reports. You should not rely on this information in making purchase or sell decisions, for tax purposes or otherwise.

UBS FS offers a number of investment advisory programs to clients, acting in our capacity as an investment adviser, including fee-based financial planning, discretionary account management, non-discretionary investment advisory programs, and advice on the selection of investment managers and mutual funds offered through our investment advisory programs. When we act as your investment adviser, we will have a written agreement with you expressly acknowledging our investment advisory relationship with you and describing our obligations to you. At the beginning of our advisory relationship, we will give you our Form ADV brochure(s) for the program(s) you selected that provides detailed information about, among other things, the advisory services we provide, our fees, our personnel, our other business activities and financial industry affiliations and conflicts between our interests and your interests.

In our attempt to provide you with the highest quality information available, we have compiled this report using data obtained from recognized statistical sources and authorities in the financial industry. While we believe this information to be reliable, we cannot make any representations regarding its accuracy or completeness. Please keep this guide as your Advisory Review.

Please keep in mind that most investment objectives are long term. Although it is important to evaluate your portfolio's performance over multiple time periods, we believe the greatest emphasis should be placed on the longer period returns.

Please review the report content carefully and contact your Financial Advisor with any questions.

Alternative Investments and Account Valuation: The investment values on which this report is based are provided by your account Custodians and/or fund administrators and have not been independently reviewed or verified by UBS Financial Services. Due to the illiquid nature of Alternative Investments, the values reflected in this report may not accurately represent the net asset value of your investment as of the date of this report. You should be aware that Alternative Investments may have a substantial part of their assets invested in securities for which market prices are not readily available. In the absence of market prices, the investment managers typically will make a good faith determination of a securities value, based on available information. Fair value determinations involve subjective judgments and it may not be possible to dispose of the securities at the fair value price assigned to it by the fund's manager. The method of performance reporting and valuation used by individual fund managers may differ and is often subject to a delay in reporting (for example, 30-90 days) depending on the type of fund and its valuation process. As a result, the assessment in this report may differ, sometimes significantly, from individual reports you receive from the fund investment managers.

Commitment: Amount of investment that a client has agreed to invest into the fund.

Contributions: Includes Capital Calls and also any shares of the fund journaled into the UBS Account.

Distributions: Includes monies distributed by the fund as well as any shares of the fund journaled out of the UBS account.

Dividends: Dividends, when shown on a report, do not reflect your account's tax status or reporting requirements. Use only official tax reporting documents (i.e. 1099) for tax reporting purposes. The classification of private investment distributions can only be determined by referring to the official year-end tax-reporting document provided by the issuer.

Value: The total market value of the position(s) as of the date indicated in the Value Date column.

Value Date: The date for which the last market value of the position was calculated by the fund managing the position.

Total Value: Value plus distributions.

Net Investment Amount: This information represents the net value of all cash and securities contributions and withdrawals added to or subtracted from the security from the first day to the last day of the period. Any redemptions submitted but not processed are not included in this amount.

Gain/Loss: Value minus Net Investment Amount. When shown on a report, do not reflect your account's tax status or reporting requirements. Use only official tax reporting documents (i.e. 1099) for tax reporting purposes.

TVPI (Total Value to Paid in): Is the ratio of Current value of the remaining investments plus distributions made divided by contributions.

DVPI (Distributed Value to Paid In): Is the ratio of Distributions divided by Contributions.

IRR (Internal Rate of Return) is the measurement of a portfolio's actual performance between two dates, including the effects from all cash inflows and outflows. Greater emphasis is given to those time periods when more money is invested in the portfolio. By this definition, the IRR of a portfolio can be significantly affected by both the size and timing of any cash contributions or withdrawals.

Annualized Performance: All performance periods greater than one year are calculated (unless otherwise stated) on an annualized basis, which represents the return on an investment multiplied or divided to give a comparable one year return.

Time-weighted Returns for accounts / SWP/AAP sleeves (Daily periods): The report displays a time weighted rate of return (TWR) that is calculated by dividing the portfolio's daily gain/loss by the previous day's closing market value plus the net value of cash flows that occurred during the day, if it was positive. The TWR gives equal weighting to every return regardless of amount of money invested, so it is an effective measure for returns on a fee based account. Periods greater than one day are calculated by linking the daily returns. All periods shown which are greater than 12 months are annualized. For reports generated prior to 01/26/2018, the performance calculations used the account's end of day value on the performance inception (listed in the report under the column "ITD") and all cash flows were posted at end of day. As a result of the change, the overall rate of return (TWR) and beginning market value displayed can vary from prior generated reports. This applies to all performance for all assets on or after 09/30/2010, Advisory assets on or after 12/31/2010, SWP/AAP sleeves on or after 04/30/2018 as well as all Asset Class and Security level returns.



Disclosures Applicable to Accounts at UBS Financial Services Inc. *(continued)*

Accounts included in this Report: The account listing may or may not include all of your accounts with UBS FS. The accounts included in this report are listed under the "Accounts included in this review" shown on the first page or listed at the top of each page. If the account is a donor advised fund account, the assets in those accounts are owned by the Sponsoring Charitable Organization, and not the donor. You and your financial advisor have procured the appropriate authorization to view the assets in the donor advised fund account. If an account number begins with "@" this denotes assets or liabilities held at other financial institutions. Information about these assets, including valuation, account type and cost basis, is based on the information you provided to us, or provided to us by third party data aggregators or custodians at your direction. We have not verified, and are not responsible for, the accuracy or completeness of this information.

Account name(s) displayed in this report and labels used for groupings of accounts can be customizable "nicknames" chosen by you to assist you with your recordkeeping or may have been included by your financial advisor for reference purposes only. The names used have no legal effect, are not intended to reflect any strategy, product, recommendation, investment objective or risk profile associated with your accounts or any group of accounts, and are not a promise or guarantee that wealth, or any financial results, can or will be achieved. All investments involve the risk of loss, including the risk of loss of the entire investment.

For more information about account or group names, or to make changes, contact your Financial Advisor.

Account changes: At UBS, we are committed to helping you work toward your financial goals. So that we may continue providing you with financial advice that is consistent with your investment objectives, please consider the following two questions:

- 1) Have there been any changes to your financial situation or investment objectives?
 - 2) Would you like to implement or modify any restrictions regarding the management of your account?
- If the answer to either question is "yes," it is important that you contact your Financial Advisor as soon as possible to discuss these changes. For MAC advisory accounts, please contact your investment manager directly if you would like to impose or change any investment restrictions on your account.

ADV disclosure: A complimentary copy of our current Form ADV Disclosure Brochure that describes the advisory program and related fees is available through your Financial Advisor. Please contact your Financial Advisor if you have any questions.

Important information for former Piper Jaffray and McDonald Investments clients: As an accommodation to former Piper Jaffray and McDonald Investments clients, these reports include performance history for their Piper Jaffray accounts prior to August 12, 2006 and McDonald Investments accounts prior to February 9, 2007, the date the respective accounts were converted to UBS FS. UBS FS has not independently verified this information nor do we make any representations or warranties as to the accuracy or completeness of that information and will not be liable to you if any such information is unavailable, delayed or inaccurate.

For insurance, annuities, and 529 Plans, UBS FS relies on information obtained from third party services it believes to be reliable. UBS FS does not independently verify or guarantee the accuracy or validity of any information provided by third parties. Information for insurance, annuities, and 529 Plans that has been provided by a third party service may not reflect the quantity and market value as of the previous business day. When available, an "as of" date is included in the description.

Investors outside the U.S. are subject to securities and tax regulations within their applicable jurisdiction that are not addressed in this report. Nothing in this report shall be construed to be a solicitation to buy or offer to sell any security, product or service to any non-U.S. investor, nor shall any such security, product or service be

solicited, offered or sold in any jurisdiction where such activity would be contrary to the securities laws or other local laws and regulations or would subject UBS to any registration requirement within such jurisdiction.

Performance History prior to the account's inception at UBS Financial Services, Inc. may have been included in this report and is based on data provided by third party sources. UBS Financial Services Inc. has not independently verified this information nor does UBS Financial Services Inc. guarantee the accuracy or validity of the information.

Important information about brokerage and advisory services. As a firm providing wealth management services to clients, UBS Financial Services Inc. offers investment advisory services in its capacity as an SEC-registered investment adviser and brokerage services in its capacity as an SEC-registered broker-dealer. Investment advisory services and brokerage services are separate and distinct, differ in material ways and are governed by different laws and separate arrangements. It is important that clients understand the ways in which we conduct business, that they carefully read the agreements and disclosures that we provide to them about the products or services we offer. For more information, please review client relationship summary provided at ubs.com/relationshipsummary.

UBS Financial Services account protection

The Firm is a member of the Securities Investor Protection Corporation (SIPC), which protects securities customers of its members up to \$500,000 (including \$250,000 for claims for cash). Explanatory brochure available upon request or at www.sipc.org. The SIPC asset protection limits apply to all accounts that you hold in a particular capacity.

The Firm, together with certain affiliates, has also purchased supplemental insurance. The maximum amount payable to all eligible clients, collectively under this protection is \$500 million as of December 10, 2019. Subject to the policy conditions and limitations, cash at the Firm is further protected for up to \$1.9 million in the aggregate for all your accounts held in a particular capacity. A full copy of the policy wording is available upon request.

Neither the SIPC protection nor the supplemental protection apply to:

- Certain financial assets controlled by (and included in your account value) but held away from UBS Financial Services. For example certain (i) insurance products, including variable annuities, and (ii) shares of mutual funds registered in the name of the account holder on the books of the issuer or transfer agent;
- Investment contracts or investment interests (e.g., limited partnerships and private placements) that are not registered under the Securities Act of 1933;
- Commodities contracts (e.g., foreign exchange and precious metal contracts), including futures contracts and commodity option contracts;
- Securities on loan to UBS Financial Services; and
- Deposit accounts (except certificates of deposit) at UBS Bank USA, UBS AG U.S. branches and banks in the FDIC Insured Deposit Program.

The SIPC protection and the supplemental protection do not apply to these assets even if they otherwise appear on your statements. The SIPC protection and the supplemental protection do not protect against changes in the market value of your investments (whether as a result of market movement, issuer bankruptcy or otherwise).



Disclosures Applicable to Accounts at UBS Financial Services Inc.

This section contains important disclosures regarding the information and valuations presented here. All information presented is subject to change at any time and is provided only as of the date indicated. The information in this report is for informational purposes only and should not be relied upon as the basis of an investment or liquidation decision. UBS FS account statements and official tax documents are the only official record of your accounts and are not replaced, amended or superseded by any of the information presented in these reports. You should not rely on this information in making purchase or sell decisions, for tax purposes or otherwise.

UBS FS offers a number of investment advisory programs to clients, acting in our capacity as an investment adviser, including fee-based financial planning, discretionary account management, non-discretionary investment advisory programs, and advice on the selection of investment managers and mutual funds offered through our investment advisory programs. When we act as your investment adviser, we will have a written agreement with you expressly acknowledging our investment advisory relationship with you and describing our obligations to you. At the beginning of our advisory relationship, we will give you our Form ADV brochure(s) for the program(s) you selected that provides detailed information about, among other things, the advisory services we provide, our fees, our personnel, our other business activities and financial industry affiliations and conflicts between our interests and your interests.

In our attempt to provide you with the highest quality information available, we have compiled this report using data obtained from recognized statistical sources and authorities in the financial industry. While we believe this information to be reliable, we cannot make any representations regarding its accuracy or completeness. Please keep this guide as your Advisory Review.

Please keep in mind that most investment objectives are long term. Although it is important to evaluate your portfolio's performance over multiple time periods, we believe the greatest emphasis should be placed on the longer period returns.

Please review the report content carefully and contact your Financial Advisor with any questions.

Client Accounts: This report may include all assets in the accounts listed and may include eligible and ineligible assets in a fee-based program. Since ineligible assets are not considered fee-based program assets, the inclusion of such securities will distort the actual performance of your accounts and does not reflect the performance of your accounts in the fee-based program. As a result, the performance reflected in this report can vary substantially from the individual account performance reflected in the performance reports provided to you as part of those programs. For fee-based programs, fees are charged on the market value of eligible assets in the accounts and assessed quarterly in advance, prorated according to the number of calendar days in the billing period. When shown on a report, the risk profile and return objectives describe your overall goals for these accounts. For each account you maintain, you choose one return objective and a primary risk profile. If you have questions regarding these objectives or wish to change them, please contact your Financial Advisor to update your account records.

Performance: This report presents account activity and performance depending on which inception type you've chosen. The two options are: (1) All Assets (Since Performance Start): This presents performance for all assets since the earliest possible date; (2) Advisory Assets (Advisory Strategy Start) for individual advisory accounts: This presents Advisory level performance since the Latest Strategy Start date; If an account that has never been managed is included in the consolidated report, the total performance of that unmanaged account will be included since inception.

Time-weighted Returns for accounts / SWP/AAP sleeves (Monthly periods): The report displays a time weighted rate of return (TWR) that is calculated using the Modified Dietz Method. This calculation uses the beginning and ending portfolio values for the month and weighs each contribution/withdrawal based upon the day the cash flow occurred. Periods greater than one month are calculated by linking the monthly returns. The TWR gives equal weighting to every return regardless of amount of money invested, so it is an effective measure for returns on a fee based account. All periods shown which are greater than 12 months are annualized. This applies to all performance for all assets before 09/30/2010, Advisory assets before 12/31/2010 and SWP sleeves before 04/30/2018.

Time-weighted Returns for accounts / SWP/AAP sleeves (Daily periods): The report displays a time weighted rate of return (TWR) that is calculated by dividing the portfolio's daily gain/loss by the previous day's closing market value plus the net value of cash flows that occurred during the day, if it was positive. The TWR gives equal weighting to every return regardless of amount of money invested, so it is an effective measure for returns on a fee based account. Periods greater than one day are calculated by linking the daily returns. All periods shown which are greater than 12 months are annualized. For reports generated prior to 01/26/2018, the performance calculations used the account's end of day value on the performance inception (listed in the report under the column "ITD") and all cash flows were posted at end of day. As a result of the change, the overall rate of return (TWR) and beginning market value displayed can vary from prior generated reports. This applies to all performance for all assets on or after 09/30/2010, Advisory assets on or after 12/31/2010, SWP/AAP sleeves on or after 04/30/2018 as well as all Asset Class and Security level returns.

Money-weighted returns: Money-weighted return (MWR) is a measure of the rate of return for an asset or portfolio of assets. It is calculated by finding the daily Internal Rate of Return (IRR) for the period and then compounding this return by the number of days in the period being measured. The MWR incorporates the size and timing of cash flows, so it is an effective measure of returns on a portfolio.

Annualized Performance: All performance periods greater than one year are calculated (unless otherwise stated) on an annualized basis, which represents the return on an investment multiplied or divided to give a comparable one year return.

Cumulative Performance: A cumulative return is the aggregate amount that an investment has gained or lost over time, independent of the period of time involved.

Net of Fees and Gross of Fees Performance: Performance is presented on a "net of fees" and "gross of fees" basis, where indicated. Net returns do not reflect Program and wrap fees prior to 10/31/10 for accounts that are billed separately via invoice through a separate account billing arrangement. Gross returns do not reflect the deduction of fees, commissions or other charges. The payment of actual fees and expenses will reduce a client's return. The compound effect of such fees and expenses should be considered when reviewing returns. For example, the net effect of the deduction of fees on annualized performance, including the compounded effect over time, is determined by the relative size of the fee and the account's investment performance. It should also be noted that where gross returns are compared to an index, the index performance also does not reflect any transaction costs, which would lower the performance results. Market index data maybe subject to review and revision.

Benchmark/Major Indices: The past performance of an index is not a guarantee of future results. Any benchmark is shown for informational purposes only and relates to historical performance of market indices and not the performance of actual investments. Although most portfolios use indices as benchmarks, portfolios are actively managed and generally are not restricted to investing only in securities in the index. As a result, your



Disclosures Applicable to Accounts at UBS Financial Services Inc. *(continued)*

portfolio holdings and performance may vary substantially from the index. Each index reflects an unmanaged universe of securities without any deduction for advisory fees or other expenses that would reduce actual returns, as well as the reinvestment of all income and dividends. An actual investment in the securities included in the index would require an investor to incur transaction costs, which would lower the performance results. Indices are not actively managed and investors cannot invest directly in the indices. Market index data may be subject to review and revision. Further, there is no guarantee that an investor's account will meet or exceed the stated benchmark. Index performance information has been obtained from third parties deemed to be reliable. We have not independently verified this information, nor do we make any representations or warranties to the accuracy or completeness of this information.

Blended Index - For Advisory accounts, Blended Index is designed to reflect the asset categories in which your account is invested. For Brokerage accounts, you have the option to select any benchmark from the list.

For certain products, the blended index represents the investment style corresponding to your client target allocation. If you change your client target allocation, your blended index will change in step with your change to your client target allocation.

Blended Index 2 - 8 - are optional indices selected by you which may consist of a blend of indexes. For advisory accounts, these indices are for informational purposes only. Depending on the selection, the benchmark selected may not be an appropriate basis for comparison of your portfolio based on its holdings.

For alternative investments and strategies that are highly customized, such as Concentrated Equity Solutions (CES), benchmarks are broad market indices included for general reference and are not intended to show comparative market performance or potential portfolios with risk or return profiles similar to your account. Benchmark indices are shown for illustrative purposes only.

Custom Time Periods: If represented on this report, the performance start date and the performance end date have been selected by your Financial Advisor in order to provide performance and account activity information for your account for the specified period of time only. As a result, only a portion of your account's activity and performance information is presented in the performance report, and, therefore, presents a distorted representation of your account's activity and performance.

Net Deposits/Withdrawals: When shown on a report, this information represents the net value of all cash and securities contributions and withdrawals, program fees (including wrap fees) and other fees added to or subtracted from your accounts from the first day to the last day of the period. When fees are shown separately, net deposits / withdrawals does not include program fees (including wrap fees). When investment return is displayed net deposits / withdrawals does not include program fees (including wrap fees). For security contributions and withdrawals, securities are calculated using the end of day UBS FS price on the day securities are delivered in or out of the accounts. Wrap fees will be included in this calculation except when paid via an invoice or through a separate accounts billing arrangement. When shown on Client summary and/or Portfolio review report, program fees (including wrap fees) may not be included in net deposits/withdrawals. PACE Program fees paid from sources other than your PACE account are treated as a contribution. A PACE Program Fee rebate that is not reinvested is treated as a withdrawal.

Deposits: When shown on a report, this information represents the net value of all cash and securities contributions added to your accounts from the first day to the last day of the period. On Client Summary Report and/or Portfolio Review Report, this may exclude the Opening balance. For security contributions, securities are calculated using the end of day UBS FS price on the day securities are delivered in or out of the accounts.

Withdrawals: When shown on a report, this information represents the net value of all cash and securities withdrawals subtracted from your accounts from the first day to the last day of the period. On Client summary and/or portfolio review report Withdrawals may not include program fees (including wrap fees). For security withdrawals, securities are calculated using the end of day UBS FS price on the day securities are delivered in or out of the accounts.

Dividends/Interest: Dividend and interest earned, when shown on a report, does not include income on securities that have been lent out & does not reflect your account's tax status or reporting requirements. Use only official tax reporting documents (i.e. 1099) for tax reporting purposes. The classification of private investment distributions can only be determined by referring to the official year-end tax-reporting document provided by the issuer.

Change in Accrued Interest: When shown on a report, this information represents the difference between the accrued interest at the beginning of the period from the accrued interest at the end of the period.

Change in Value: Represents the change in value of the portfolio during the reporting period, excluding additions/withdrawals, dividend and interest income earned and accrued interest. Change in Value may include program fees (including wrap fees) and other fees.

Fees: Fees represented in this report include program and wrap fees. Program and wrap fees prior to October 1, 2010 for accounts that are billed separately via invoice through a separate account billing arrangement are not included in this report.

Performance Start Date Changes: The Performance Start Date for accounts marked with a '^' have changed. Performance figures of an account with a changed Performance Start Date may not include the entire history of the account. The new Performance Start Date will generate performance returns and activity information for a shorter period than is available at UBS FS. As a result, the overall performance of these accounts may generate better performance than the period of time that would be included if the report used the inception date of the account. UBS FS recommends reviewing performance reports that use the inception date of the account because reports with longer time frames are usually more helpful when evaluating investment programs and strategies. Performance reports may include accounts with inception dates that precede the new Performance Start Date and will show performance and activity information from the earliest available inception date. The change in Performance Start Date may be the result of a performance gap due to a zero-balance that prevents the calculation of continuous returns from the inception of the account. The Performance Start Date may also change if an account has failed one of our performance data integrity tests. In such instances, the account will be labeled as 'Review Required' and performance prior to that failure will be restricted. Finally, the Performance Start Date will change if you have explicitly requested a performance restart. Please contact your Financial Advisor for additional details regarding your new Performance Start Date.

Closed Account Performance: Accounts that have been closed may be included in the consolidated performance report. When closed accounts are included in the consolidated report, the performance report will only include information for the time period the account was active during the consolidated performance reporting time period.

Important information on options-based strategies: Options involve risk and are not suitable for everyone. Prior to buying or selling an option investors must read a copy of the Characteristics & Risks of Standardized Options, also known as the options disclosure document (ODD). It explains the characteristics and risks of



Disclosures Applicable to Accounts at UBS Financial Services Inc. *(continued)*

exchange traded options. The options risk disclosure document can be accessed at the following web address: www.optionsclearing.com/about/publications/character-risks.

Concentrated Equity Solutions (CES) managers are not involved in the selection of the underlying stock positions. The Manager will advise only on the options selection in order to pursue the strategy in connection with the underlying stock position(s) deposited in the account. It is important to keep this in mind when evaluating the manager's performance since the account's performance will include the performance of the underlying equity position that is not being managed. CES use options to seek to achieve your investment objectives regarding your concentration stock position. Options strategies change the potential return profile of your stock. In certain scenarios, such as call writing, the call position will limit your ability to participate in any potential increase in the underlying equity position upon which the call was written. Therefore, in some market conditions, particularly during periods of significant appreciation of the underlying equity position(s), the CES account will decrease the performance that would have been achieved had the stock been held long without implementing the CES strategy.

Portfolio: For purposes of this report "portfolio" is defined as all of the accounts presented on the cover page or the header of this report and does not necessarily include all of the client's accounts held at UBS FS or elsewhere.

Percentage: Portfolio (in the "% Portfolio / Total" column) includes all holdings held in the account(s) selected when this report was generated. Broad asset class (in the "% broad asset class" column) includes all holdings held in that broad asset class in the account(s) selected when this report was generated.

Pricing: All securities are priced using the closing price reported on the last business day preceding the date of this report. Every reasonable attempt has been made to accurately price securities; however, we make no warranty with respect to any security's price. Please refer to the back of the first page of your UBS FS account statement for important information regarding the pricing used for certain types of securities, the sources of pricing data and other qualifications concerning the pricing of securities. To determine the value of securities in your account, we generally rely on third party quotation services. If a price is unavailable or believed to be unreliable, we may determine the price in good faith and may use other sources such as the last recorded transaction. When securities are held at another custodian or if you hold illiquid or restricted securities for which there is no published price, we will generally rely on the value provided by the custodian or issuer of that security.

Cash: Cash on deposit at UBS Bank USA is protected by the Federal Deposit Insurance Corporation (FDIC) up to \$250,000 in principal and accrued interest per depositor for each ownership type. Deposits made in an individual's own name, joint name, or individual retirement account are each held in a separate type of ownership. Such deposits are not guaranteed by UBS FS. More information is available upon request.

Margin: The quantity value may indicate that all or part of this position is held on margin or held in the short account. When an account holds a debit balance, this debit balance is incorporated into the account's total market value and deducted from the total value. When calculating the percent of portfolio on each security, the percentage will be impacted by the total market value of the account. Therefore, if the account's market value is reduced by a debit value of a holding the percent of portfolio will be greater and if the account's market value is increased by a holding then the percent of portfolio will be less.

Asset Allocation: Your allocation analysis is based on your current portfolio. The Asset Allocation portion of this report shows the mix of various investment classes in your account. An asset allocation that shows a

significantly higher percentage of equity investments may be more appropriate for an investor with a more aggressive investment strategy and higher tolerance for risk. Similarly, the asset allocation of a more conservative investor may show a higher percentage of fixed income investments.

Separately Managed Accounts and Pooled Investment Vehicles (such as mutual funds, closed end funds and exchanged traded funds): The asset classification displayed is based on firm's proprietary methodology for classifying assets. Please note that the asset classification assigned to rolled up strategies may include individual investments that provide exposure to other asset classes. For example, an International Developed Markets strategy may include exposure to Emerging Markets, and a US Large Cap strategy may include exposure to Mid Cap and Small Cap, etc.

Mutual Fund Asset Allocation: If the option to unbundle balanced mutual funds is selected and if a fund's holdings data is available, mutual funds will be classified by the asset class, subclass, and style breakdown of their underlying holdings. Where a mutual fund or ETF contains equity holdings from multiple equity sectors, this report will proportionately allocate the underlying holdings of the fund to those sectors measured as a percentage of the total fund's asset value as of the date shown.

This information is supplied by Morningstar, Inc. on a daily basis to UBS FS based on data supplied by the fund which may not be current. Mutual funds change their portfolio holdings on a regular (often daily) basis. Accordingly, any analysis that includes mutual funds may not accurately reflect the current composition of these funds. If a fund's underlying holding data is not available, it will be classified based on its corresponding overall Morningstar classification. All data is as of the date indicated in the report.

All pooled investment vehicles (such as mutual funds, closed end mutual funds, and exchange traded funds) incorporate internal management and operation expenses, which are reflected in the performance returns. Please see relevant fund prospectus for more information. Please note, performance for mutual funds is inclusive of multiple share classes.

Ineligible Assets: We require that you hold and purchase only eligible managed assets in your advisory accounts. Please contact your Financial Advisor for a list of the eligible assets in your program. These reports may provide performance information for eligible and ineligible assets in a fee-based program. Since ineligible assets are not considered fee-based program assets, the inclusion of such securities will distort the actual performance of your advisory assets. As a result, the performance reflected in this report can vary substantially from the individual account performance reflected in the performance reports provided to you as part of those programs. For fee-based programs, fees are charged on the market value of eligible assets in the accounts and assessed quarterly in advance, prorated according to the number of calendar days in the billing period. Neither UBS nor your Financial Advisor will act as your investment adviser with respect to Ineligible Assets.

Variable Annuity Asset Allocation: If the option to unbundle a variable annuity is selected and if a variable annuity's holdings data is available, variable annuities will be classified by the asset class, subclass, and style breakdown for their underlying holdings. Where a variable annuity contains equity holdings from multiple equity sectors, this report will proportionately allocate the underlying holdings of the variable annuity to those sectors measured as a percentage of the total variable annuity's asset value as of the date shown.

This information is supplied by Morningstar, Inc. on a weekly basis to UBS FS based on data supplied by the variable annuity which may not be current. Portfolio holdings of variable annuities change on a regular (often daily) basis. Accordingly, any analysis that includes variable annuities may not accurately reflect the current composition of these variable annuities. If a variable annuity's underlying holding data is not available, it will



Disclosures Applicable to Accounts at UBS Financial Services Inc. *(continued)*

remain classified as an annuity. All data is as of the date indicated in the report.

Equity Style: The Growth, Value and Core labels are determined by Morningstar. If an Equity Style is unclassified, it is due to non-availability of data required by Morningstar to assign it a particular style.

Equity Capitalization: Market Capitalization is determined by Morningstar. Equity securities are classified as Large Cap, Mid Cap or Small Cap by Morningstar. Unclassified securities are those for which no capitalization is available on Morningstar.

Equity Sectors: The Equity sector analysis may include a variety of accounts, each with different investment and risk parameters. As a result, the overweighting or underweighting in a particular sector or asset class should not be viewed as an isolated factor in making investment/liquidation decisions; but should be assessed on an account by account basis to determine the overall impact on the account's portfolio.

Classified Equity: Classified equities are defined as those equities for which the firm can confirm the specific industry and sector of the underlying equity instrument.

Largest Equity Holdings: The Largest Equity Holdings exhibit may include the equity portions of balanced mutual funds if the option to unbundle mutual funds has been selected. In such cases, the market value represented is that of the equity portion and not the total market value of the mutual fund.

Current Yield: Current yield calculations display the current yield of the investment solely as of the date of this report, is defined as the estimated annual income divided by the total market value. For Portfolio Holdings report generated prior to June 23, 2023, savings products & sweep funds do not include such information and instead, values are displayed as N/A. For all other reports, Current Yield for savings products & sweep funds is not calculated or factored into aggregate calculations and will be displayed as 0.

Bond Rating: These ratings are obtained from independent industry sources and are not verified by UBS FS. Securities without rating information are left blank. Rating agencies may discontinue ratings on high yield securities.

NR: When NR is displayed under bond rating column, no ratings are currently available from that rating agency.

High Yield: This report may designate a security as a high yield fixed income security even though one or more rating agencies rate the security as an investment grade security. Further, this report may incorporate a rating that is no longer current with the rating agency. For more information about the rating for any high yield fixed income security, or to consider whether to hold or sell a high yield fixed income security, please contact your financial advisor or representative and do not make any investment decision based on this report.

Credit/Event Risk: Investments are subject to event risk and changes in credit quality of the issuer. Issuers can experience economic situations that may have adverse effects on the market value of their securities.

Interest Rate Risk: Bonds are subject to market value fluctuations as interest rates rise and fall. If sold prior to maturity, the price received for an issue may be less than the original purchase price.

Reinvestment Risk: Since most corporate issues pay interest semiannually, the coupon payments over the life of the bond can have a major impact on the bond's total return.

Effective Maturity: Effective maturity is the expected redemption due to pre-refunding, puts, or maturity and does not reflect any sinking fund activity, optional or extraordinary calls. Securities without a maturity date are left blank and typically include Preferred Securities, Mutual Funds and Fixed Income UITs.

Yields: Yield to Maturity and Yield to Worst are calculated to the worst call.

Accrued Interest: Interest that has accumulated between the most recent payment and the report date may be reflected in market values for interest bearing securities.

Bond Averages: All averages are weighted averages calculated based on market value of the holding, not including accrued interest.

Tax Status: "Taxable" includes all securities held in a taxable account that are subject to federal and/or state or local taxation. "Tax-exempt" includes all securities held in a taxable account that are exempt from federal, state and local taxation. "Tax-deferred" includes all securities held in a tax-deferred account, regardless of the status of the security.

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For more information about account or group names, or to make changes, contact your Financial Advisor.

Account changes: At UBS, we are committed to helping you work toward your financial goals. So that we may continue providing you with financial advice that is consistent with your investment objectives, please consider the following two questions:

- 1) Have there been any changes to your financial situation or investment objectives?
- 2) Would you like to implement or modify any restrictions regarding the management of your account?

If the answer to either question is "yes," it is important that you contact your Financial Advisor as soon as possible to discuss these changes. For MAC advisory accounts, please contact your investment manager directly if you would like to impose or change any investment restrictions on your account.

ADV disclosure: A complimentary copy of our current Form ADV Disclosure Brochure that describes the advisory program and related fees is available through your Financial Advisor. Please contact your Financial



Disclosures Applicable to Accounts at UBS Financial Services Inc. *(continued)*

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UBS Financial Services account protection

The Firm is a member of the Securities Investor Protection Corporation (SIPC), which protects securities customers of its members up to \$500,000 (including \$250,000 for claims for cash). Explanatory brochure available upon request or at www.sipc.org. The SIPC asset protection limits apply to all accounts that you hold in a particular capacity.

The Firm, together with certain affiliates, has also purchased supplemental insurance. The maximum amount payable to all eligible clients, collectively under this protection is \$500 million as of December 10, 2019. Subject to the policy conditions and limitations, cash at the Firm is further protected for up to \$1.9 million in the aggregate for all your accounts held in a particular capacity. A full copy of the policy wording is available upon request.

Neither the SIPC protection nor the supplemental protection apply to:

- Certain financial assets controlled by (and included in your account value) but held away from UBS Financial Services. For example certain (i) insurance products, including variable annuities, and (ii) shares of mutual funds registered in the name of the account holder on the books of the issuer or transfer agent);
- Investment contracts or investment interests (e.g., limited partnerships and private placements) that are not registered under the Securities Act of 1933;
- Commodities contracts (e.g., foreign exchange and precious metal contracts), including futures contracts and commodity option contracts;
- Securities on loan to UBS Financial Services; and
- Deposit accounts (except certificates of deposit) at UBS Bank USA, UBS AG U.S. branches and banks in the FDIC Insured Deposit Program.

The SIPC protection and the supplemental protection do not apply to these assets even if they otherwise appear on your statements. The SIPC protection and the supplemental protection do not protect against changes in the market value of your investments (whether as a result of market movement, issuer bankruptcy or otherwise).

Appendix

Statement of Risk

Equities - Stock market returns are difficult to forecast because of fluctuations in the economy, investor psychology, geopolitical conditions and other important variables.

Fixed income - Bond market returns are difficult to forecast because of fluctuations in the economy, investor psychology, geopolitical conditions and other important variables. Corporate bonds are subject to a number of risks, including credit risk, interest rate risk, liquidity risk, and event risk. Though historical default rates are low on investment-grade corporate bonds, perceived adverse changes in the credit quality of an issuer may negatively affect the market value of securities. As interest rates rise, the value of a fixed-coupon security will likely decline. Bonds are subject to market value fluctuations, given changes in the level of risk-free interest rates. Not all bonds can be sold quickly or easily on the open market. Prospective investors should consult their tax advisors concerning the federal, state, local, and non-US tax consequences of owning any securities referenced in this report.

Preferred securities - Prospective investors should consult their tax advisors concerning the federal, state, local, and non-US tax consequences of owning preferred stocks. Preferred stocks are subject to market value fluctuations, given changes in the level of interest rates. For example, if interest rates rise, the value of these securities could decline. If preferred stocks are sold prior to maturity, price and yield may vary. Adverse changes in the credit quality of the issuer may negatively affect the market value of the securities. Most preferred securities may be redeemed at par after five years. If this occurs, holders of the securities may be faced with a reinvestment decision at lower future rates. Preferred stocks are also subject to other risks, including illiquidity and certain special redemption provisions.

Municipal bonds - Although historical default rates are very low, all municipal bonds carry credit risk, with the degree of risk largely following the particular bond's sector. Additionally, all municipal bonds feature valuation, return, and liquidity risk. Valuation tends to follow internal and external factors, including the level of interest rates, bond ratings, supply factors, and media reporting. These can be difficult or impossible to project accurately. Also, most municipal bonds are callable and/or subject to earlier-than-expected redemption, which can reduce an investor's total return. Because of the large number of municipal issuers and credit structures, not all bonds can be easily or quickly sold on the open market.

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Explanations about asset classes

Our preferences represent the longer-term allocation of assets that is deemed suitable for a particular investor and were developed and approved by the US Investment Strategy Committee. Our preferences are provided for illustrative purposes only and will differ among investors according to their individual circumstances, risk tolerance, return objectives and time horizon. Therefore, our preferences in this publication may not be suitable for all investors or investment goals and should not be used as the sole basis of any investment decision. Minimum net worth requirements may apply to allocations to non-traditional assets. As always, please consult your UBS Financial Advisor to see how our preferences should be applied or modified according to your individual profile and investment goals.

Our preferences does not assure profits or prevent against losses from an investment portfolio or accounts in a declining market.

Appendix

Emerging Market Investments

Investors should be aware that Emerging Market assets are subject to, amongst others, potential risks linked to currency volatility, abrupt changes in the cost of capital and the economic growth outlook, as well as regulatory and socio-political risk, interest rate risk and higher credit risk. Assets can sometimes be very illiquid and liquidity conditions can abruptly worsen. CIO GWM generally recommends only those securities it believes have been registered under Federal U.S. registration rules (Section 12 of the Securities Exchange Act of 1934) and individual State registration rules (commonly known as "Blue Sky" laws). Prospective investors should be aware that to the extent permitted under US law, CIO GWM may from time to time recommend bonds that are not registered under US or State securities laws. These bonds may be issued in jurisdictions where the level of required disclosures to be made by issuers is not as frequent or complete as that required by US laws.

Investors interested in holding bonds for a longer period are advised to select the bonds of those sovereigns with the highest credit ratings (in the investment grade band). Such an approach should decrease the risk that an investor could end up holding bonds on which the sovereign has defaulted. Sub-investment grade bonds are recommended only for clients with a higher risk tolerance and who seek to hold higher yielding bonds for shorter periods only.

Nontraditional Assets

Nontraditional asset classes are alternative investments that include hedge funds, private equity, real estate, and managed futures (collectively, alternative investments).

Interests of alternative investment funds are sold only to qualified investors, and only by means of offering documents that include information about the risks, performance and expenses of alternative investment funds, and which clients are urged to read carefully before subscribing and retain. An investment in an alternative investment fund is speculative and involves significant risks. Specifically, these investments

- (1) are not mutual funds and are not subject to the same regulatory requirements as mutual funds;
- (2) may have performance that is volatile, and investors may lose all or a substantial amount of their investment;
- (3) may engage in leverage and other speculative investment practices that may increase the risk of investment loss;
- (4) are long-term, illiquid investments; there is generally no secondary market for the interests of a fund, and none is expected to develop;
- (5) interests of alternative investment funds typically will be illiquid and subject to restrictions on transfer;
- (6) may not be required to provide periodic pricing or valuation information to investors;
- (7) generally involve complex tax strategies and there may be delays in distributing tax information to investors;
- (8) are subject to high fees, including management fees and other fees and expenses, all of which will reduce profits.

Interests in alternative investment funds are not deposits or obligations of, or guaranteed or endorsed by, any bank or other insured depository institution, and are not federally insured by the Federal Deposit Insurance Corporation, the Federal Reserve Board, or any other governmental agency. Prospective investors should understand these risks and have the financial ability and willingness to accept them for an extended period of time before making an investment in an alternative investment fund and should consider an alternative investment fund as a supplement to an overall investment program.

In addition to the risks that apply to alternative investments generally, the following are additional risks related to an investment in these strategies:

Hedge Fund Risk: There are risks specifically associated with investing in hedge funds, which may include risks associated with investing in short sales, options, small-cap stocks, "junk bonds," derivatives, distressed securities, non-US securities and illiquid investments.

Managed Futures: There are risks specifically associated with investing in managed futures programs. For example, not all managers focus on all strategies at all times, and managed futures strategies may have material directional elements.

Real Estate: There are risks specifically associated with investing in real estate products and real estate investment trusts. They involve risks associated with debt, adverse changes in general economic or local market conditions, changes in governmental, tax, real estate and zoning laws or regulations, risks associated with capital calls and, for some real estate products, the risks associated with the ability to qualify for favorable treatment under the federal tax laws.

Private Equity: There are risks specifically associated with investing in private equity. Capital calls can be made on short notice, and the failure to meet capital calls can result in significant adverse consequences including, but not limited to, a total loss of investment.

Foreign Exchange/Currency Risk: Investors in securities of issuers located outside of the United States should be aware that even for securities denominated in US dollars, changes in the exchange rate between the US dollar and the issuer's "home" currency can have unexpected effects on the market value and liquidity of those securities. Those securities may also be affected by other risks (such as political, economic or regulatory changes) that may not be readily known to a US investor.

Appendix

Global Investment Process and Committee Description

The UBS investment process is designed to achieve replicable, high-quality results through applying intellectual rigor, strong process governance, clear responsibility and a culture of challenge.

Based on the analyses and assessments conducted and vetted throughout the investment process, the Chief Investment Officer (CIO) formulates the UBS Wealth Management Investment House View preferences at the Global Investment Committee (GIC). Senior investment professionals from UBS, complemented by selected external experts, debate and rigorously challenge the investment strategy to ensure consistency and risk control.

Global Investment Committee Composition

The GIC comprises top market and investment expertise from UBS:

- Mark Haefele (Chair)
- Solita Marcelli
- Tan Min Lin
- Themis Themistocleous
- Paul Donovan
- Bruno Marxer(*)
- Adrian Zuercher
- Mark Anderson

(*) Business area distinct from Chief Investment Office Global Wealth Management

US Investment Strategy Committee description

We recognize that a globally derived house view is most effective when complemented by local perspective and application. As such, UBS has formed a Global Wealth Management US Investment Strategy Committee.

US Investment Strategy Committee Composition

- Solita Marcelli
- Jason Draho (chair)
- Leslie Falconio
- David Lefkowitz
- Brian Rose
- Daniel Scansaroli

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This report contains statements that constitute “forward-looking statements”, including but not limited to statements relating to the current and expected state of the securities market and capital market assumptions. While these forward-looking statements represent our judgments and future expectations concerning the matters discussed in this document, a number of risks, uncertainties, changes in the market, and other important factors could cause actual developments and results to differ materially from our expectations. These factors include, but are not limited to (1) the extent and nature of future developments in the US market and in other market segments; (2) other market and macro-economic developments, including movements in local and international securities markets, credit spreads, currency exchange rates and interest rates, whether or not arising directly or indirectly from the current market crisis; (3) the impact of these developments on other markets and asset classes. UBS is not under any obligation to (and expressly disclaims any such obligation to) update or alter its forward-looking statements whether as a result of new information, future events, or otherwise.

Risk information

Non-Traditional Assets

Non-traditional asset classes are alternative investments that include hedge funds, private equity, real estate, and managed futures (collectively, alternative investments). Interests of alternative investment funds are sold only to qualified investors, and only by means of offering documents that include information about the risks, performance and expenses of alternative investment funds, and which clients are urged to read carefully before subscribing and retain. An investment in an alternative investment fund is speculative and involves significant risks. Specifically, these investments (1) are not mutual funds and are not subject to the same regulatory requirements as mutual funds; (2) may have performance that is volatile, and investors may lose all or a substantial amount of their investment; (3) may engage in leverage and other speculative investment practices that may increase the risk of investment loss; (4) are long-term, illiquid investments, there is generally no secondary market for the interests of a fund, and none is expected to develop; (5) interests of alternative investment funds typically will be illiquid and subject to restrictions on transfer; (6) may not be required to provide periodic pricing or valuation information to investors; (7) generally involve complex tax strategies and there may be delays in distributing tax information to investors; (8) are subject to high fees, including management fees and other fees and expenses, all of which will reduce profits.

Interests in alternative investment funds are not deposits or obligations of, or guaranteed or endorsed by, any bank or other insured depository institution, and are not federally insured by the Federal Deposit Insurance Corporation, the Federal Reserve Board, or any other governmental agency. Prospective investors should understand these risks and have the financial ability and willingness to accept them for an extended period of time before making an investment in an alternative investment fund and should consider an alternative investment fund as a supplement to an overall investment program.

In addition to the risks that apply to alternative investments generally, the following are additional risks related to an investment in these strategies:

- **Hedge Fund Risk:** There are risks specifically associated with investing in hedge funds, which may include risks associated with investing in short sales, options, small-cap stocks, "junk bonds," derivatives, distressed securities, non-U.S. securities and illiquid investments.
- **Managed Futures:** There are risks specifically associated with investing in managed futures programs. For example, not all managers focus on all strategies at all times, and managed futures strategies may have material directional elements.
- **Real Estate:** There are risks specifically associated with investing in real estate products and real estate investment trusts. They involve risks associated with debt, adverse changes in general economic or local market conditions, changes in governmental, tax, real estate and zoning laws or regulations, risks associated with capital calls and, for some real estate products, the risks associated with the ability to qualify for favorable treatment under the federal tax laws.
- **Private Equity:** There are risks specifically associated with investing in private equity. Capital calls can be made on short notice, and the failure to meet capital calls can result in significant adverse consequences including, but not limited to, a total loss of investment.
- **Foreign Exchange/Currency Risk:** Investors in securities of issuers located outside of the United States should be aware that even for securities denominated in U.S. dollars, changes in the exchange rate between the U.S. dollar and the issuer's "home" currency can have unexpected effects on the market value and liquidity of those securities. Those securities may also be affected by other risks (such as political, economic or regulatory changes) that may not be readily known to a U.S. investor.

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