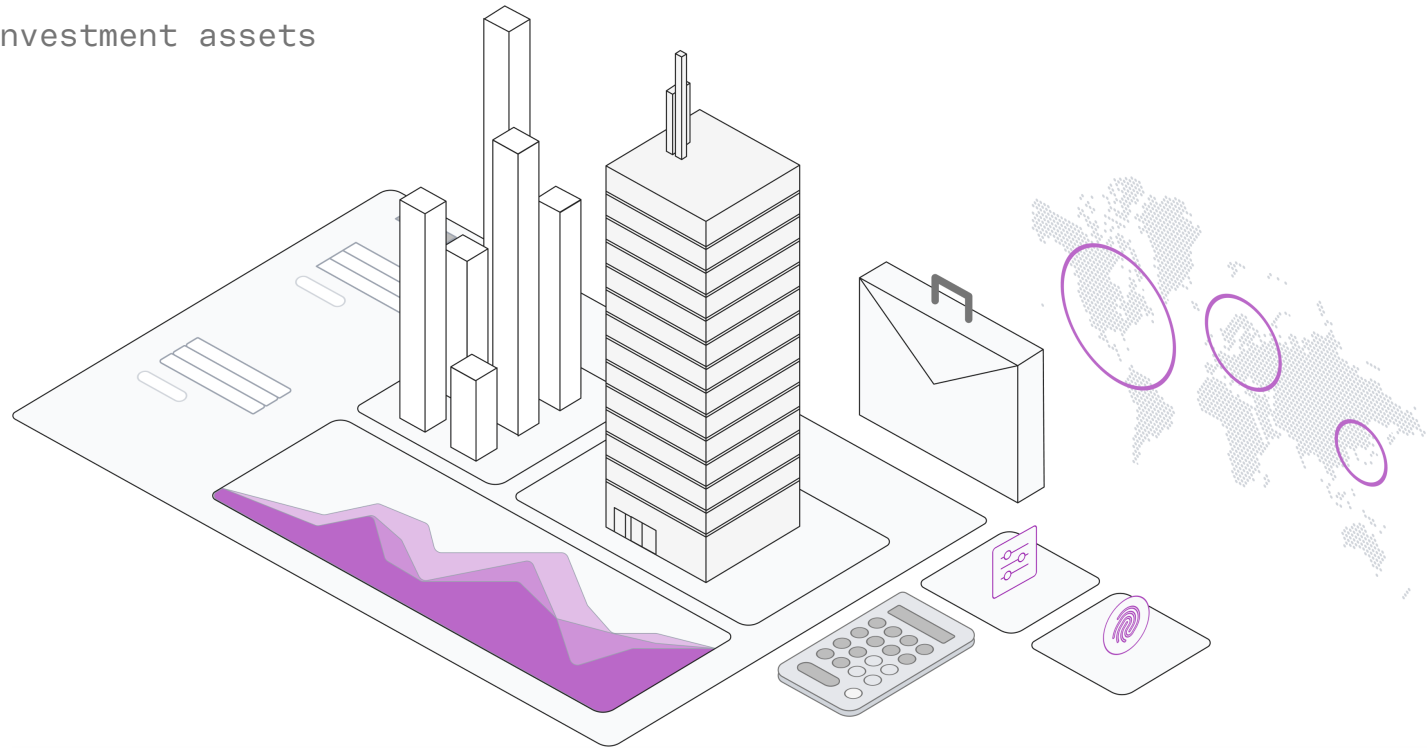




Jay

Monthly report

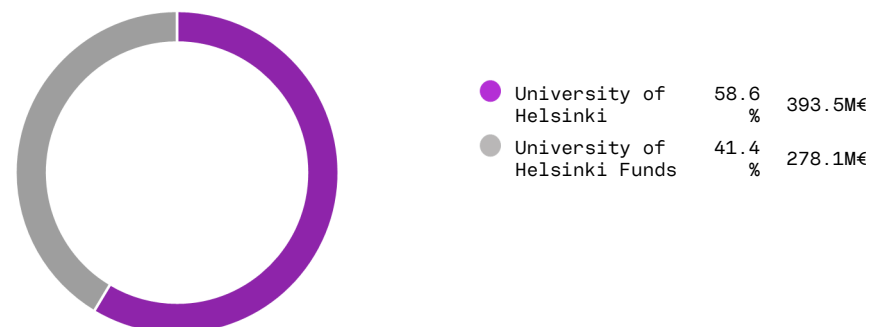
University of Helsinki - Investment assets



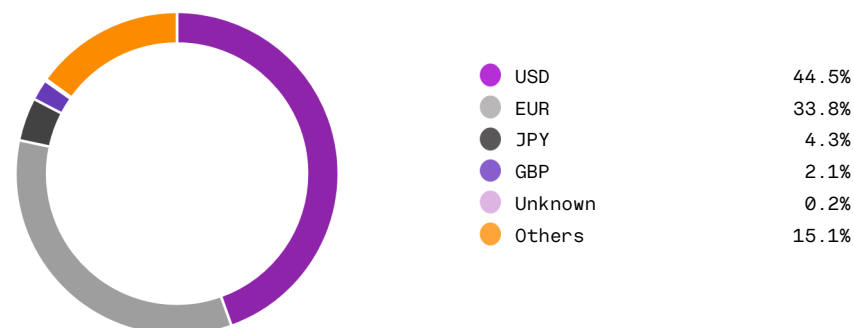
Helsingin yliopisto
31.12.2023

Listed Equities	M-value (EUR)	% of class	% of portfolio	Periodic return
Funds	464 124 668	97.0%	69.1%	19.76%
Direct shares	14 435 314	3.0%	2.1%	-35.76%
	478 559 982		71.3%	
Fixed Income				
Government bonds	90 700 366	61.8%	13.5%	3.51%
Corp. bonds IG (long, > 2 years)	25 709 458	17.5%	3.8%	8.83%
Corp. bonds IG (short, < 2 years)	30 269 432	20.6%	4.5%	6.42%
	146 679 256		21.8%	
Other				
Spinout companies	25 799 530	92.4%	3.8%	13.18%
Startup companies	129 959	0.5%	0.0%	-18.75%
Non-listed funds	1 502 805	5.4%	0.2%	-12.38%
Other non-listed investmets	491 269	1.8%	0.1%	24.11%
	27 923 563		4.2%	
Cash				
Cash	18 419 427			
	18 419 427		2.7%	
Investments total	671 582 228		13.5%	

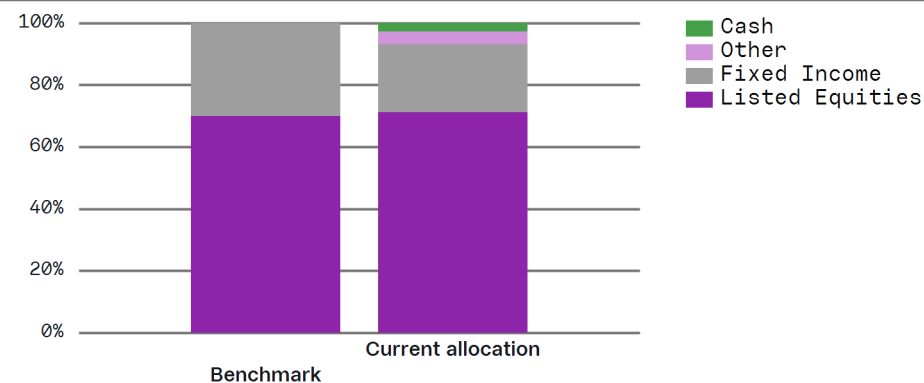
Portfolio distribution



Currency distribution - J-Ray*

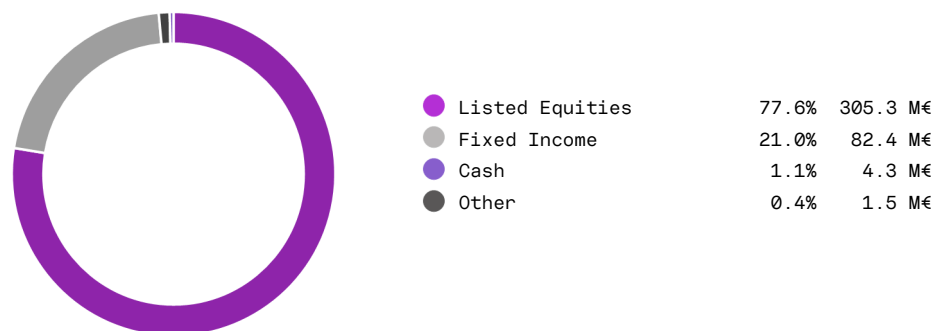


Current allocation

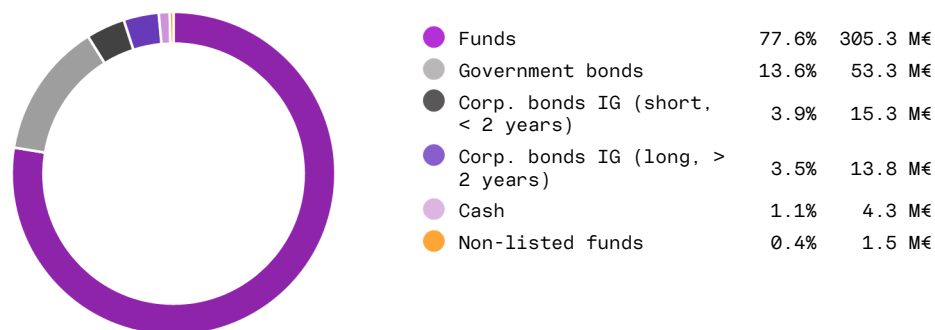


University of Helsinki

Asset allocation

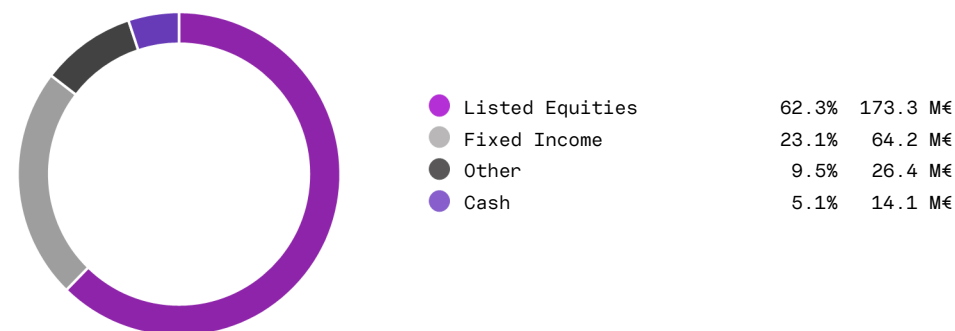


Detailed asset allocation

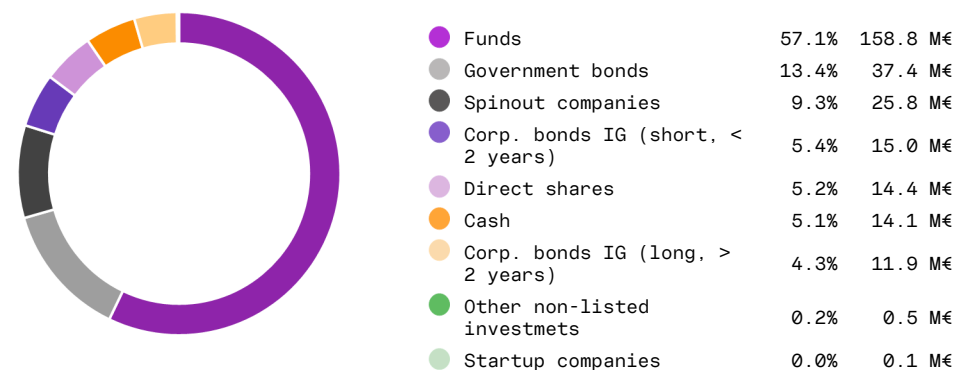


University of Helsinki Funds

Asset allocation



Detailed asset allocation

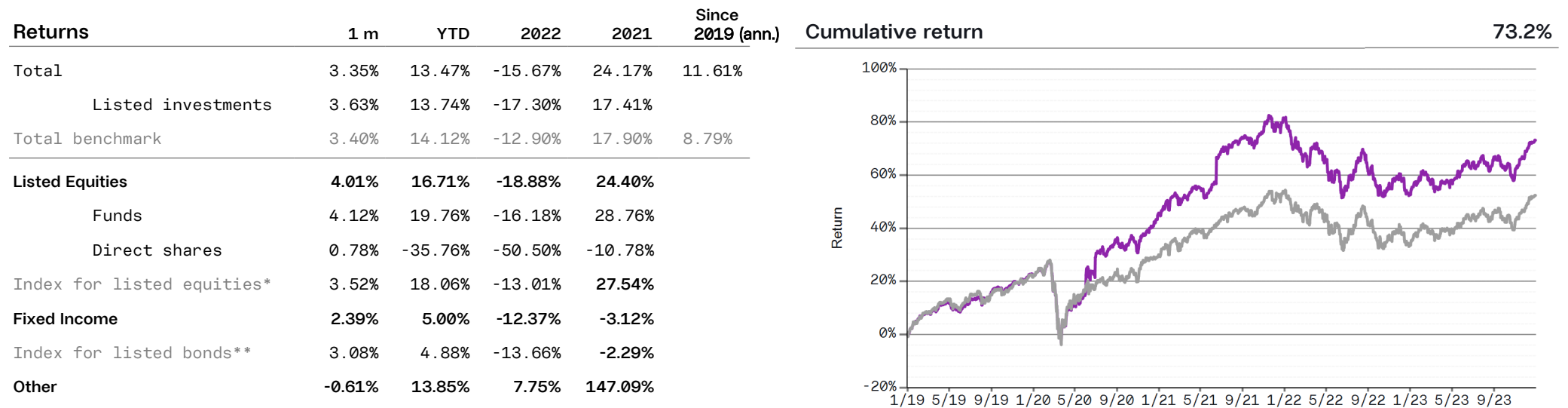


Summary of returns

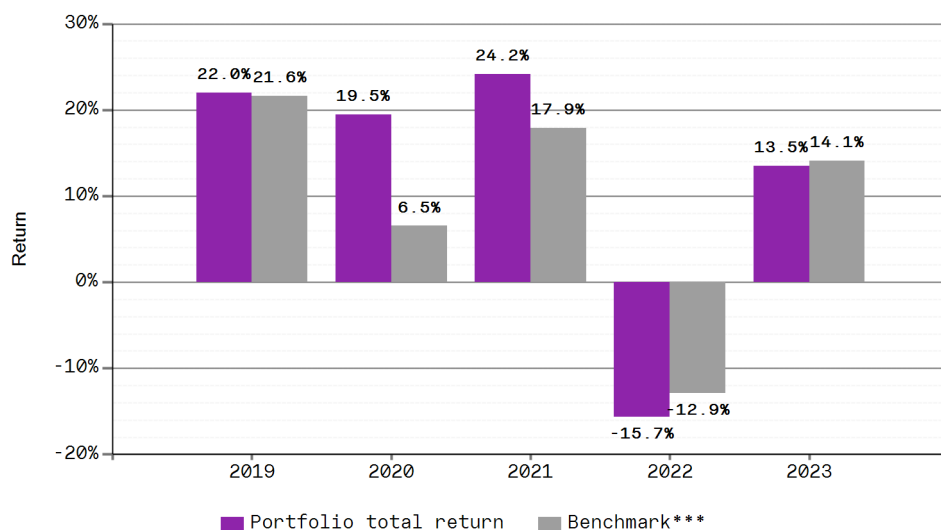
University of Helsinki -
Investment assets
Created: 11.01.2024

Date: 01.01.2019 - 31.12.2023

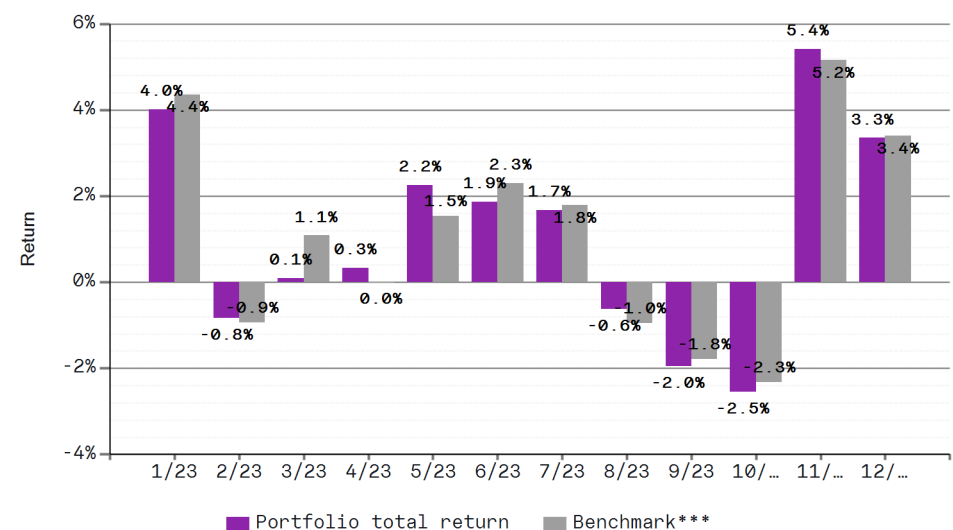
Currency: EUR



Annual returns



Monthly returns past 12 months



*** Index Composition: MSCI ACWI Net Total Return EUR Index: Weight 70%, **Bloomberg Barclays Global Aggregate Float Adjusted TR Index Hedged EUR: Weight 30%

2012-2019 returns calculated by OP, excluding non-listed investments. Non-listed investments calculated by JAY Solutions since 2019. Portfolio total return by JAY Solutions

Largest contributors to portfolio returns

University of Helsinki -
Investment assets
Created: 11.01.2024

Date: 31.12.2023
Currency: EUR



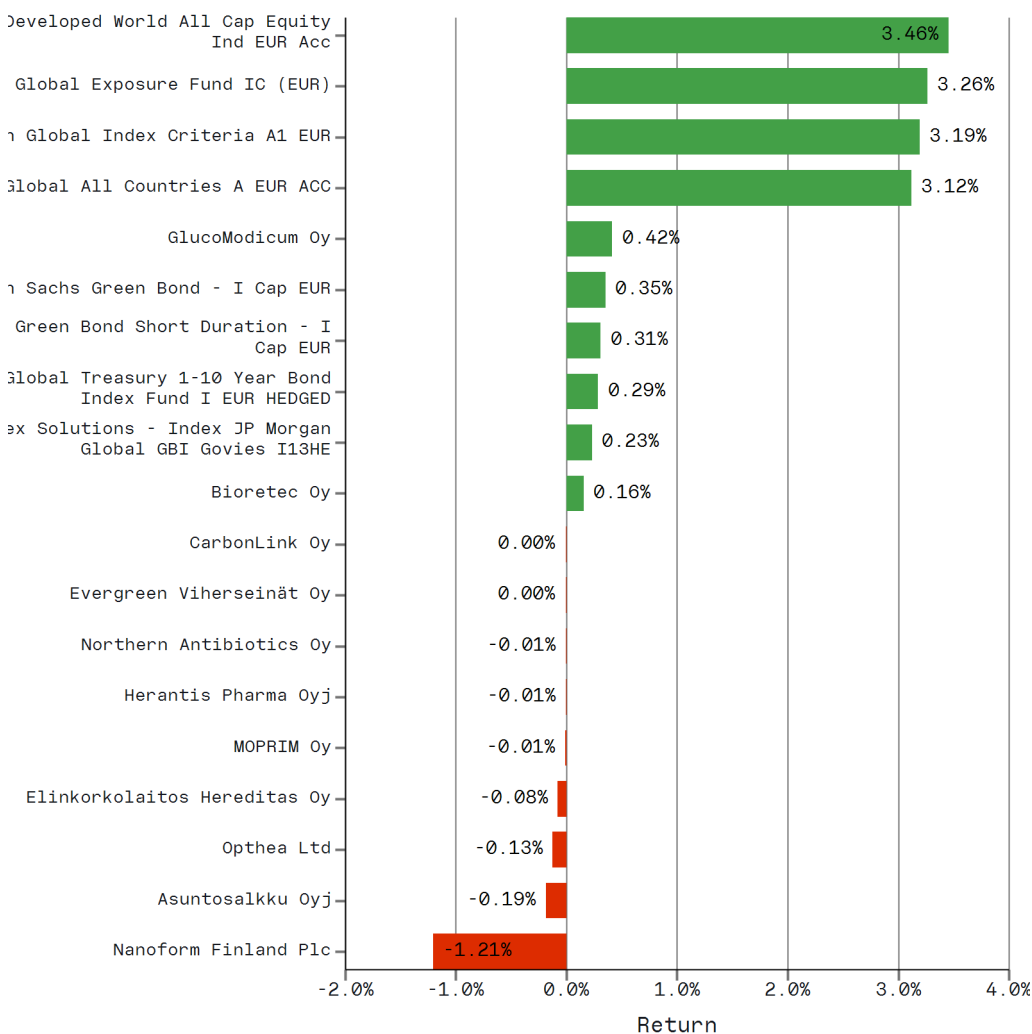
10 largest positive return contributors YTD

Security	YTD	1 m	3 m	1 year	% of portfolio
Vanguard ESG Developed World All Cap Equity Ind EUR Acc	3.46 %	3.46 %	1.33 %	3.46 %	16.77 %
SEB Global Exposure Fund IC (EUR)	3.26 %	3.26 %	1.23 %	3.26 %	16.75 %
Handelsbanken Global Index Criteria A1 EUR	3.19 %	3.19 %	1.11 %	3.19 %	17.65 %
Storebrand Global All Countries A EUR ACC	3.12 %	3.12 %	1.26 %	3.12 %	17.95 %
GlucModicum Oy	0.42 %	0.42 %	0.39 %	0.42 %	1.80 %
Goldman Sachs Green Bond - I Cap EUR	0.35 %	0.35 %	0.29 %	0.35 %	3.83 %
Goldman Sachs Green Bond Short Duration - I Cap EUR	0.31 %	0.31 %	0.16 %	0.31 %	4.51 %
State Street Global Treasury 1-10 Year Bond Index Fund I EUR HEDGED	0.29 %	0.29 %	0.26 %	0.29 %	7.27 %
Amundi Index Solutions - Index JP Morgan Global GBI Govies I13HE	0.23 %	0.23 %	0.32 %	0.23 %	6.23 %
Bioretec Oy	0.16 %	0.16 %	-0.04 %	0.16 %	0.33 %

10 largest negative return contributors YTD

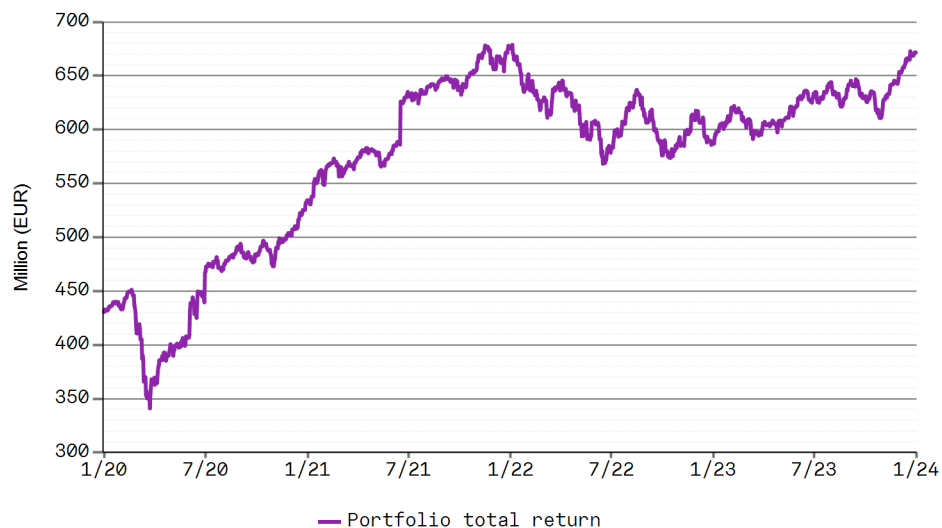
Security	YTD	1 m	3 m	1 year	% of portfolio
Nanoform Finland Plc	-1.21 %	-1.21 %	-0.14 %	-1.21 %	1.04 %
Asuntosalkku Oyj	-0.19 %	-0.19 %	0.01 %	-0.19 %	0.48 %
Opthea Ltd	-0.13 %	-0.13 %	0.07 %	-0.13 %	0.16 %
Elinkorkolaitos Hereditas Oy	-0.08 %	-0.08 %	-0.10 %	-0.08 %	
MOPRIM Oy	-0.01 %	-0.01 %	-0.01 %	-0.01 %	0.00 %
Herantis Pharma Oyj	-0.01 %	-0.01 %	-0.01 %	-0.01 %	0.13 %
Northern Antibiotics Oy	-0.01 %	-0.01 %	-0.01 %	-0.01 %	0.00 %
Evergreen Viherseinät Oy	0.00 %	0.00 %	0.00 %	0.00 %	0.00 %
CarbonLink Oy	0.00 %	0.00 %	0.00 %	0.00 %	0.05 %

Largest return contributors YTD

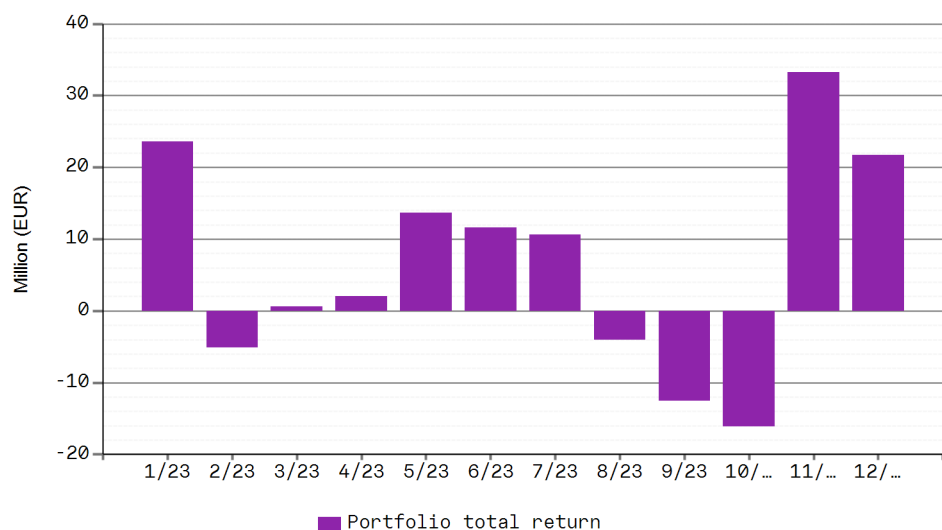


The return contributions of all instruments do not necessarily add up to the portfolio total returns (shown on the portfolio return report), because for example costs or currency account movements are not shown on this report, but can affect portfolio total returns.

Development of portfolio value



Monthly returns past 12 months



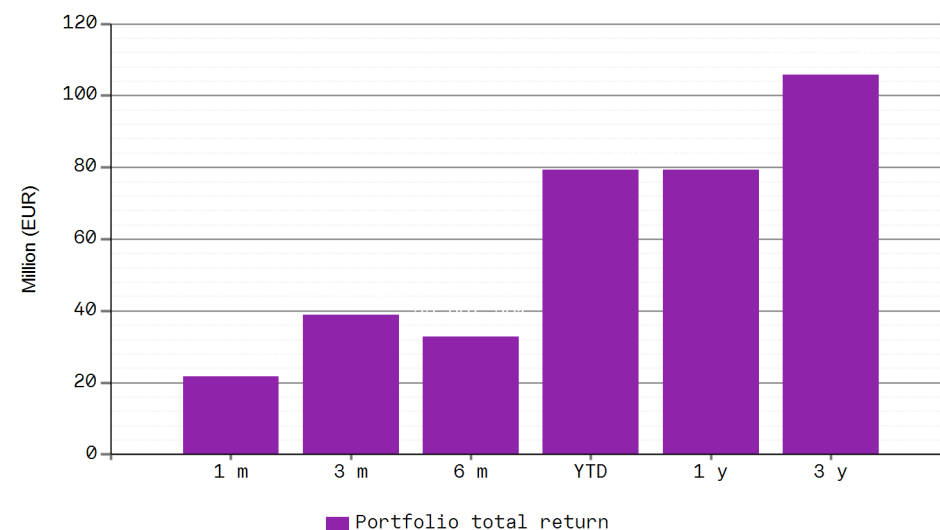
Change of market value

	31.12.2019	YTD
Starting balance	430 748 113	586 894 471
Withdrawals, deposits and other transactions into/out from portfolio	46 264 398	5 458 042
Portfolio periodic return	194 580 291	79 240 288
Period ending balance	671 582 228	671 582 228

Portfolio value X-Ray

Securities valuation differences after fees	188 807 061	78 100 794
Securities paid proceeds after taxes	5 815 873	1 139 471
Accounts periodic returns	- 21 741	23
Charged fees and taxes from accounts	- 20 902	0
Portfolio periodic return	194 580 291	79 240 288
Securities fees and taxes during period	- 68 468	- 21 136

Periodic returns past 12 months



Equity report

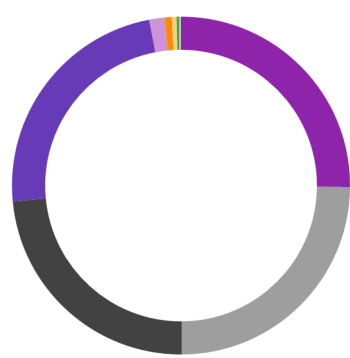


From portfolio information *										From security information *						
Security	Purchase month	Cur	Units	P-value (EUR)	M-value(EUR)	Change(EUR)	1 m profit	YTD profit	Total profit	YTD +/- %	TE**	Vol**	Beta**	IR	% of class	% of portfolio
Funds																
Handelsbanken Global Index Criteria A1 EUR	03/19	EUR	2 845 694.59	76 475 575	118 523 180	42 047 605	4.1%	18.8%	39.5%	0.4%	0.7%	10.4%	0.8	0.58%	24.8%	17.6%
SEB Global Exposure Fund IC (EUR)	08/20	EUR	686 024.28	84 557 224	112 464 762	27 907 538	3.8%	20.6%	41.3%	2.3%	1.5%	10.9%	0.8	1.60%	23.5%	16.7%
Storebrand Global All Countries A EUR ACC	05/20	EUR	692 147.87	83 811 346	120 544 820	36 733 473	4.1%	17.9%	50.3%	-0.4%	1.1%	10.2%	1.0	-0.39%	25.2%	17.9%
Vanguard ESG Developed World All Cap Equity Ind EUR Acc	10/20	EUR	328 624.29	94 203 439	112 591 907	18 388 468	4.4%	22.0%	38.0%	3.8%	2.0%	11.5%	0.9	1.96%	23.5%	16.8%
339 047 584 464 124 668 125 077 085															97.0% 69.1%	
Direct shares																
Asuntosalkku Oyj	06/22	EUR	40 952	4 299 960	3 255 684	-1 044 276	3.9%	-24.9%	-44.3%	-43.0%	17.5%	34.6%	0.2	-2.46%	0.7%	0.5%
Bioretec Oy	09/21	EUR	917 966	4 331 483	2 203 118	-2 128 365	7.6%	70.8%	-20.0%	52.8%	57.9%	54.6%	2.1	0.91%	0.5%	0.3%
Herantis Pharma Oyj	12/09	EUR	572 678	3 352 284	901 968	-2 450 316	1.6%	-4.5%	-70.7%	-22.6%	53.8%	66.0%	1.1	-0.42%	0.2%	0.1%
Nanoform Finland Plc	06/20	EUR	4 397 719	300 761	6 970 385	6 669 624	-3.9%	-50.5%	-55.7%	-68.5%	66.9%	61.8%	1.8	-1.02%	1.5%	1.0%
Opthea Ltd	03/12	AUD	3 150 340	1 291 639	1 104 159	- 187 480	10.4%	-39.9%	-2.0%	-55.8%	64.1%	70.7%	0.9	-0.87%	0.2%	0.2%
13 576 128 14 435 314 859 186															3.0% 2.1%	
Total			352 623 711			478 559 982	125 936 271								100% 71.3%	

* Analytics are calculated from the securities' time series. Returns are calculated as total returns and include all events during the period.
** Tracking error and beta are calculated against the MSCI World Net Total Return EUR index using 12 month rolling weekly observations (Tracking error using monthly data). The metrics are only shown if the security has 12 months of data.

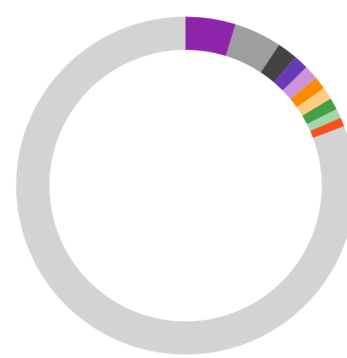
7

Allocation: Top 10



	Portfolio distribution
Storebrand Global All Countries A EUR ACC	25.1%
Handelsbanken Global Index Criteria A1 EUR	24.8%
Vanguard ESG Developed World All Cap Equity Ind EUR Acc	23.6%
SEB Global Exposure Fund IC (EUR)	23.5%
Nanoform Finland Plc	1.5%
Asuntosalkku Oyj	0.7%
Bioretec Oy	0.5%
Opthea Ltd	0.2%
Herantis Pharma Oyj	0.2%

Equity allocation - J-Ray*: Top 10



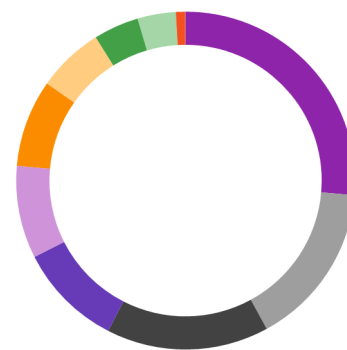
	Portfolio distribution n	Index distribution **	Difference
Apple Inc	5.0%	4.5%	0.4%
Microsoft Corp	4.7%	4.0%	0.8%
NVIDIA Corp	2.0%	1.8%	0.2%
Nanoform Finland Plc	1.5%	0.0%	1.5%
Alphabet Inc Class A	1.4%	1.2%	0.1%
Meta Platforms Inc Class A	1.3%	1.2%	0.1%
Alphabet Inc Class C	1.2%	1.1%	0.1%
Amazon.com Inc	1.2%	2.1%	-1.0%
UnitedHealth Group Inc	0.9%	0.7%	0.2%
Eli Lilly and Co	0.9%	0.7%	0.2%
Muut	84.1%		

Country-allocation - J-Ray*



	Portfolio distribution n	Index distribution **	Difference
United states	61.6%	62.1%	-0.5%
Japan	6.0%	5.4%	0.6%
Finland	3.1%	0.3%	2.8%
Switzerland	2.8%	2.8%	0.0%
Canada	2.8%	2.9%	-0.2%
United Kingdom	2.6%	3.6%	-1.0%
China	2.6%	2.7%	-0.1%
Germany	2.0%	2.0%	-0.1%
Unknown	0.0%	0.0%	0.0%
Others	16.7%	18.2%	-1.6%

Sector allocation - J-Ray*



	Portfolio distribution n	Index distribution **	Difference
Technology	26.3%	23.1%	3.1%
Financial Services	15.6%	15.6%	0.0%
Healthcare	15.4%	11.7%	3.8%
Consumer Cyclical	9.9%	10.7%	-0.7%
Industrials	8.8%	10.4%	-1.6%
Communication Services	8.3%	7.4%	0.9%
Consumer Defensive	6.3%	6.8%	-0.4%
Basic Materials	4.3%	4.3%	0.0%
Real Estate	3.6%	2.4%	1.2%
Sector Utilities	0.9%	2.6%	-1.7%
Energy	0.0%	4.7%	-4.7%

Fixed income report

University of Helsinki -
Investment assets
Created: 11.01.2024

Date: 31.12.2023

Currency: EUR

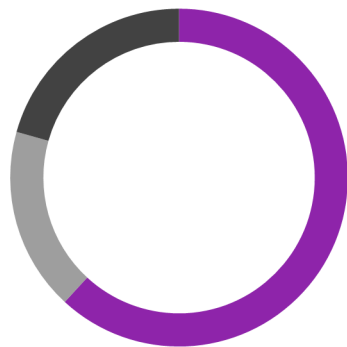


From portfolio information *											From security information *								
Security	Purchase month	Cur	Units	P-value (EUR)	M-value (EUR)	Change (EUR)	Dur	1 m profit	YTD profit	Total profit	YTD +/- %	TE**	Vol**	Beta**	IR	% of class	% of portfolio		
Government bonds																			
Amundi Index Solutions - Index JP Morgan Global GBI Govies I13HE	12/20	EUR	48 548	47 581 996	41 868 459	-5 713 537	7.1	2.8%	3.4%	-13.6%	-1.5%	1.7%	5.1%	0.9	-0.86%	28.5%	6.2%		
State Street Global Treasury 1-10 Year Bond Index Fund I EUR HEDGED	07/21	EUR	5 193 005	51 442 103	48 831 907	-2 610 197	4.2	1.8%	3.6%	-5.3%	-1.3%	3.1%	3.0%	0.5	-0.43%	33.3%	7.3%		
																61.8%13.5%			
Corp. bonds IG (long, > 2 years)																			
Goldman Sachs Green Bond - I Cap EUR	05/20	EUR	5 347	30 372 643	25 709 458	-4 663 185	6.9	3.8%	8.8%	-12.8%	3.5%	2.7%	7.3%	1.2	1.31%	17.5%	3.8%		
																17.5%3.8%			
Corp. bonds IG (short, < 2 years)																			
Goldman Sachs Green Bond Short Duration - I Cap EUR	02/21	EUR	61 694	31 620 998	30 269 432	-1 351 565	1.9	1.6%	6.4%	-4.6%	1.5%	4.1%	2.4%	0.3	0.37%	20.6%	4.5%		
																20.6%4.5%			
Total				161 017 739	146 679 256	-14 338 484	5.0											100.0%	21.8%

* Analytics are calculated from the securities' time series. Returns are calculated as total returns and include all events during the period.

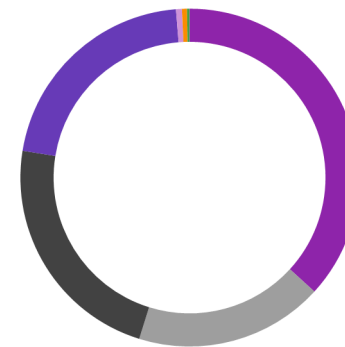
** Tracking error, volatility and beta are calculated against the BBGA index using 12 month rolling weekly observations. The metrics are only shown if the security has 12 months

Allocation



	Portfolio distribution
Government bonds	61.8%
Corp. bonds IG (long, > 2 years)	17.5%
Corp. bonds IG (short, < 2 years)	20.6%

Rating (S&P) - J-Ray*



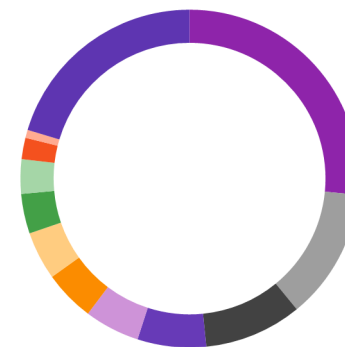
	Portfolio distribution	Index distribution **	Difference
AAA	23.2%	48.0%	-24.7%
AA	11.4%	14.9%	-3.5%
A	14.4%	20.0%	-5.6%
BBB	13.4%	16.1%	-2.7%
BB	0.4%	0.0%	0.4%
Not Rated	0.3%	0.3%	0.0%
Unknown	0.2%	0.0%	0.2%

Maturity - J-Ray*



	Portfolio distribution	Index distribution **	Difference
0-1	27.8%	22.6%	5.2%
1-2	20.3%	18.5%	1.8%
2-3	10.3%	19.0%	-8.7%
3-5	20.4%	30.8%	-10.4%
5-7	5.9%	7.0%	-1.1%
7-10	3.7%	1.2%	2.5%
10+	9.7%	0.0%	9.7%

Country-allocation - J-Ray*



	Portfolio distribution	Index distribution	Difference
United states	26.5%	47.8%	-21.3%
Japan	12.5%	6.9%	5.7%
France	9.3%	6.0%	3.4%
Italy	6.6%	3.7%	2.8%
Spain	5.3%	2.8%	2.5%
United Kingdom	4.9%	4.1%	0.7%
Netherlands	4.6%	1.4%	3.2%
Germany	3.8%	8.3%	-4.5%
China	3.3%	0.7%	2.6%
Belgium	2.0%	1.2%	0.9%
Unknown	0.8%	0.0%	0.8%
Others	20.3%	17.1%	3.3%

Non-listed investments

University of Helsinki -
Investment assets
Created: 11.01.2024

Date: 01.01.2023 - 31.12.2023

Currency: EUR



Security	Cur	Units	Owner-ship %	Purchase month	P-value (EUR)	M-value(EUR)	M-Value updated	Balance sheet value (EUR)	% of class	% of portfolio	Periodic cashflow	Total cashflow	Periodic change *	Periodic return%	Total return%	Com mit-ment left
Spinout companies																
Equity																
Airmodus Oy	EUR	801	34.8%	03/2010	950 768	0	06/2020	0	0.0%	0.0%	0	0	0	0.0%	-100.0%	
Aplagon Oy	EUR	60 238	10.8%	08/2010	1 116 665	1 445 712	05/2021	1 116 665	5.6%	0.2%	0	0	0	0.0%	9.1%	
Avenue Biosciences Holding Inc.	EUR	1 125 000	10.0%	11/2023	107	107		107	0.0%	0.0%	0	0	107	0.0%	0.0%	
CarbonLink Oy	EUR	25 846	17.8%	06/2021	50 001	365 837	07/2023	50 001	1.4%	0.1%	0	0	- 9 188	-2.5%	631.7%	
Dalan Animal Health Inc.	USD	1 050 517	10.1%	01/2019	60 350	2 081 307	02/2023	60 350	8.1%	0.3%	0	0	366 333	21.4%	4105.1%	
Fun Academy Oy	EUR	7 690	5.0%	12/2015	50 000	0		0	0.0%	0.0%	0	0	0	0.0%	0.0%	
GlucModicum Oy	EUR	31 554	15.7%	03/2018	249 646	12 097 804	11/2023	249 646	46.9%	1.8%	0	0	2 448 590	25.4%	22884.1%	
Helsinki International Schools Group Oy	EUR	203 300	10.7%	12/2015	179 402	831 497	03/2021	179 402	3.2%	0.1%	0	0	0	0.0%	363.5%	
Karsa Oy	EUR	1 014 921	9.3%	05/2016	300 175	672 487	11/2022	300 175	2.6%	0.1%	0	0	0	0.0%	201.1%	
Kasvu Therapeutics Oy	EUR	45 000	20.2%	06/2023	200 000	450 000	11/2023	200 000	1.7%	0.1%	0	0	450 000	125.0%	125.0%	
Megasense Oy	EUR	217 500	25.0%	12/2022		0		0	0.0%	0.0%	0	0	0	0.0%	0.0%	
MOPRIM Oy	EUR	33 297	27.2%	11/2015	63 563	0	12/2023	0	0.0%	0.0%	0	0	- 63 563	-100.0%	-100.0%	
Nadmed Oy	EUR	27 155	22.1%	01/2022	51 311	646 561	10/2022	51 311	2.5%	0.1%	0	0	0	0.0%	1160.1%	
Perfat Technologies Oy	EUR	2 000	20.0%	06/2023		0		0	0.0%	0.0%	0	0	0	0.0%	0.0%	
Rokote Laboratories Finland Oy	EUR	250 000	4.2%	03/2021		250 000	07/2021	0	1.0%	0.0%	0	0	0	0.0%	0.0%	
TeamFluent Oy	EUR	2 600	26.0%	06/2020	650	0	12/2021	0	0.0%	0.0%	0	0	0	0.0%	-100.0%	
The Solubility Company Oy	EUR	27 455	20.1%	02/2018	82 022	1 482 570	12/2020	55 994	5.7%	0.2%	0	0	0	0.0%	2770.0%	
Uute Scientific Oy	EUR	404	10.1%	03/2020	105 864	922 591	07/2022	105 864	3.6%	0.1%	0	0	0	0.0%	175026.6 %	
Valo Therapeutics Oy	EUR	39 218	21.1%	06/2016	1 075 627	4 252 408	06/2020	1 075 627	16.5%	0.6%	0	0	0	0.0%	295.3%	
Veil.ai Oy	EUR	26 000	24.0%	06/2020	650	650		650	0.0%	0.0%	0	0	0	0.0%	0.0%	

* Unrealized gain

Valuations (except book values) are updated when new information is available, and hence some discrepancies may arise e.g., while new shares are being registered.

Non-listed investments



Security	Cur	Units	Owner-ship %	Purchase month	P-value (EUR)	M-value(EUR)	M-Value updated	Balance sheet value (EUR)	% of class	% of portfolio	Periodic cashflow	Total cashflow	Periodic change *	Periodic return%	Total return%	Com mit-ment left
Loans																
Avenue Biosciences Holding Inc. Iaina	EUR			11/2023	50 000	50 000		50 000	0.2%	0.0%	0	0	50 000	0.0%	0.0%	
Nadmed Oy VVK	EUR			04/2023	150 000	150 000		150 000	0.6%	0.0%	0	0	150 000	0.0%	0.0%	
Perfat Technologies Oy VVK	EUR			06/2023	50 000	50 000		50 000	0.2%	0.0%	0	0	50 000	0.0%	0.0%	
TeamFluent Oy VVK	EUR			08/2020	50 000	0	12/2021	0	0.0%	0.0%	0	0	0	0.0%	-100.0%	
Veil.ai Oy VVK	EUR			06/2020	50 000	50 000		50 000	0.2%	0.0%	0	0	0	0.0%	0.0%	
					4 886 801	25 799 530		3 745 793	100.0%	3.8%	0	0	3 442 279	13.3%	1245.2%	
Startup companies																
Equity																
Evergreen Viherseinät Oy	EUR	64	5.5%	03/2021	30 000	0	12/2023	0	0.0%	0.0%	0	0	- 30 000	-100.0%	-100.0%	
Evexia Oy	EUR	11 096	4.2%	03/2021	29 959	29 959		29 959	23.1%	0.0%	0	0	0	0.0%	0.0%	
Loans																
Mäsli Oy VVK	EUR	50 000		06/2023	50 000	50 000		50 000	38.5%	0.0%	0	0	50 000	0.0%	0.0%	
Three Musketeers Oy VVK	EUR	50 000		06/2023	50 000	50 000		50 000	38.5%	0.0%	0	0	50 000	0.0%	0.0%	
					159 959	129 959		129 959	100.0%	0.0%	0	0	70 000	-50.0%	-50.0%	
Non-listed funds																
Funds																
Elinkorkolaitos Hereditas Oy	EUR		0.0%	01/2016	0	0	10/2023	0	0.0%	0.0%	2 191 098	2 800 519	- 2 092 463	-18.3%	321.5%	Exit
The Forest Co Ltd	USD		0.9%	08/2011	2 805 387	1 502 805	10/2023	1 502 805	100.0%	0.2%	0	415 885	36 464	2.5%	-46.4%	
					2 805 387	1 502 805		1 502 805	100.0%	0.2%	2 191 098	3 216 403	-2 055 999	-12.4%	15.1%	

Impact investments

* Unrealized gain

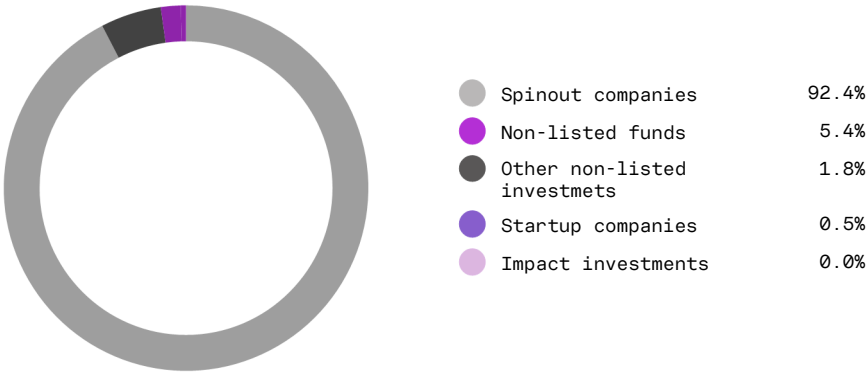
Valuations (except book values) are updated when new information is available, and hence some discrepancies may arise e.g., while new shares are being registered.

Security	Cur	Units	Owner-ship %	Purchase month	P-value (EUR)	M-value(EUR)	M-Value updated	Balance sheet value (EUR)	% of class	% of portfolio	Periodic cashflow	Total cashflow	Periodic change *	Periodic return%	Total return%	Com mit-ment left
Loans																
Finnfund - Advans S.A.	EUR			03/2022	0	0		0	0.0%	0.0%	2 024 722	2 107 422	0	0.7%	4.4%	Exit
										0.0%	2 024 722	2 107 422	0	0.7%	4.4%	
Other non-listed investmets																
Equity																
HVR Cardio Oy	EUR	55 810	1.2%	10/2022	453 624	446 480	10/2022	453 624	90.9%	0.1%	0	0	0	0.0%	-1.6%	
Northern Antibiotics Oy	EUR	560 674	9.7%	02/2018	214 728	0	12/2023	0	0.0%	0.0%	0	33 528	- 40 000	-100.0%	-100.0%	
Oy 4Pharma Ltd.	EUR		0.0%	02/2013	0	0	06/2021	0	0.0%	0.0%	0	0	0	0.0%	0.0%	Exit
Pharmatest Services Oy	EUR	757	2.2%	03/2010	477 400	0	12/2020	0	0.0%	0.0%	0	0	0	0.0%	-100.0%	
Zora Biosciences Oy	EUR	27 993	0.5%	02/2018	342 195	44 789	09/2021	44 789	9.1%	0.0%	0	0	0	0.0%	220.0%	
					1 487 947	491 269		498 412	100.0%	0.1%	0	33 528	- 40 000	24.1%	684.2%	
Total					9 340 095	27 923 563		5 876 970		4.2%	4 215 820	5 357 354	-1 416 280			

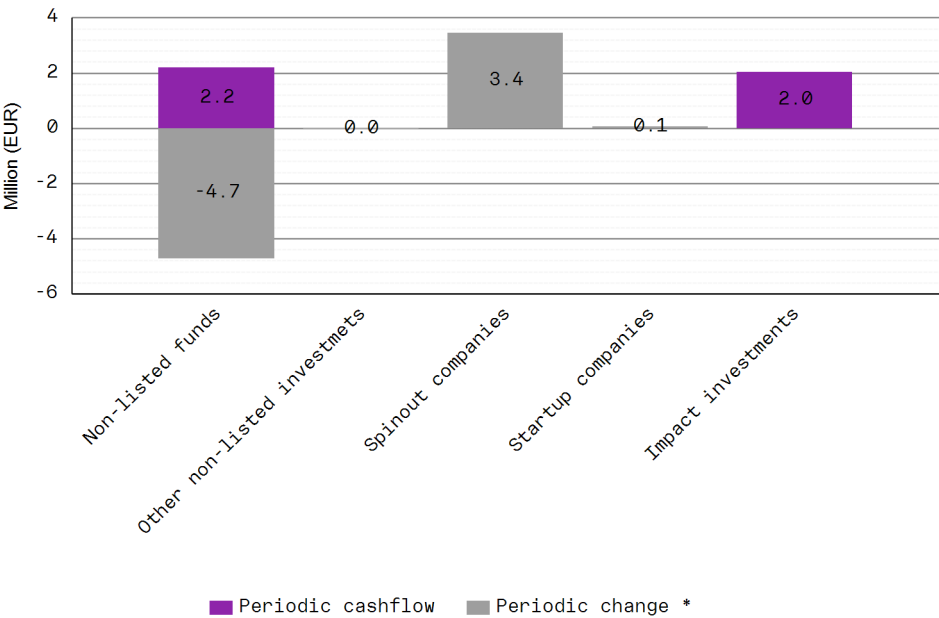
* Unrealized gain

Valuations (except book values) are updated when new information is available, and hence some discrepancies may arise e.g., while new shares are being registered.

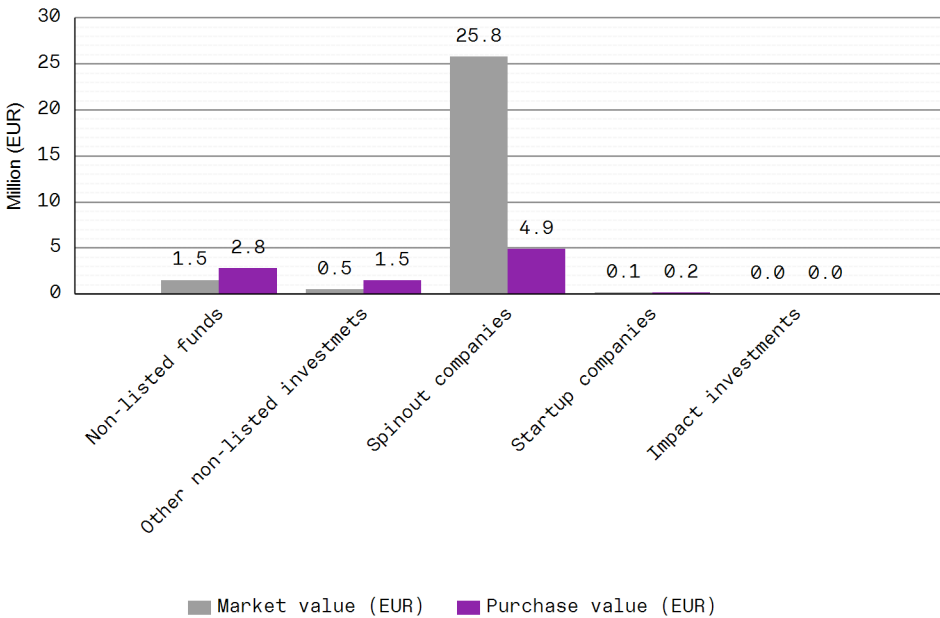
Non-listed investments



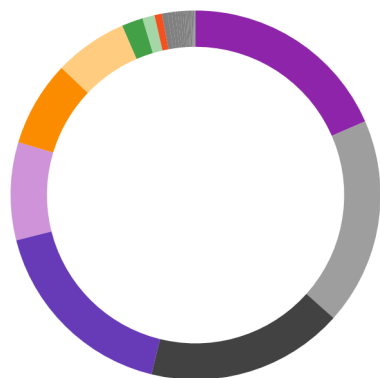
Periodic return: 01.01.2023 - 31.12.2023



Market and purchase value difference



Issuer risk Top 10



Issuer / Security	Risk (EUR)	% of portfolio
Storebrand Fonder AB	120 544 820	17.9%
Handelsbanken Fonder AB	118 523 180	17.6%
Vanguard Investment Series PLC	112 591 907	16.8%
SEB Investment Management AB	112 464 762	16.7%
Goldman Sachs Asset Management	55 978 890	8.3%
State Street Global Advisors SICAV	48 831 907	7.3%
Amundi Luxembourg SA	41 868 459	6.2%
GlucoModicum Oy	12 097 804	1.8%
Nanoform Finland Plc	6 970 385	1.0%
Valo Therapeutics Oy	4 252 408	0.6%

Risk Figures

	Rolling 12m	From 1.1.2019	2022	2023
Portfolio volatility	8.1%	12.0%	11.2%	8.2%
Listed investments volatility	8.6%		12.0%	8.7%
Benchmark volatility *	8.1%	11.5%	12.2%	8.2%
Portfolio tracking error *	4.0%	5.8%	4.1%	4.0%
Listed investments tracking error *	4.2%		4.1%	4.2%
Beta *	0.86	0.92	0.84	0.87
Listed investments Beta *	0.91		0.90	0.92
Portfolio Information ratio	-0.16%	3.59%	-0.68%	-0.16%

Weekly data

* Benchmark: MSCI ACWI Net Total Return EUR Index: Weight 70 %, Bloomberg Barclays Global Aggregate Float Adjusted TR Index Hedged EUR: Weight 30 %.

Portfolio weighted TER 0.09%

Scenario analysis: MSCI Daily Net TR All Country World EUR

		Index value change																				
		-50 %	-45 %	-40 %	-35 %	-30 %	-25 %	-20 %	-15 %	-10 %	-5 %	0 %	5 %	10 %	15 %	20 %	25 %	30 %	35 %	40 %	45 %	50 %
Change in interest rates	-2.0 %	-40.5 %	-36.3 %	-32.0 %	-27.8 %	-23.6 %	-19.3 %	-15.1 %	-10.9 %	-6.7 %	-2.4 %	1.8 %	6.0 %	10.2 %	14.5 %	18.7 %	22.9 %	27.1 %	31.4 %	35.6 %	39.8 %	44.0 %
	-1.5 %	-40.9 %	-36.7 %	-32.5 %	-28.2 %	-24.0 %	-19.8 %	-15.6 %	-11.3 %	-7.1 %	-2.9 %	1.3 %	5.6 %	9.8 %	14.0 %	18.2 %	22.5 %	26.7 %	30.9 %	35.1 %	39.4 %	43.6 %
	-1.0 %	-41.4 %	-37.1 %	-32.9 %	-28.7 %	-24.5 %	-20.2 %	-16.0 %	-11.8 %	-7.6 %	-3.3 %	0.9 %	5.1 %	9.3 %	13.6 %	17.8 %	22.0 %	26.2 %	30.5 %	34.7 %	38.9 %	43.1 %
	-0.5 %	-41.8 %	-37.6 %	-33.4 %	-29.1 %	-24.9 %	-20.7 %	-16.5 %	-12.2 %	-8.0 %	-3.8 %	0.4 %	4.7 %	8.9 %	13.1 %	17.3 %	21.6 %	25.8 %	30.0 %	34.2 %	38.5 %	42.7 %
	0.0 %	-42.3 %	-38.0 %	-33.8 %	-29.6 %	-25.4 %	-21.1 %	-16.9 %	-12.7 %	-8.5 %	-4.2 %	0.0 %	4.2 %	8.5 %	12.7 %	16.9 %	21.1 %	25.4 %	29.6 %	33.8 %	38.0 %	42.3 %
	0.5 %	-42.7 %	-38.5 %	-34.2 %	-30.0 %	-25.8 %	-21.6 %	-17.3 %	-13.1 %	-8.9 %	-4.7 %	-0.4 %	3.8 %	8.0 %	12.2 %	16.5 %	20.7 %	24.9 %	29.1 %	33.4 %	37.6 %	41.8 %
	1.0 %	-43.1 %	-38.9 %	-34.7 %	-30.5 %	-26.2 %	-22.0 %	-17.8 %	-13.6 %	-9.3 %	-5.1 %	-0.9 %	3.3 %	7.6 %	11.8 %	16.0 %	20.2 %	24.5 %	28.7 %	32.9 %	37.1 %	41.4 %
	1.5 %	-43.6 %	-39.4 %	-35.1 %	-30.9 %	-26.7 %	-22.5 %	-18.2 %	-14.0 %	-9.8 %	-5.6 %	-1.3 %	2.9 %	7.1 %	11.3 %	15.6 %	19.8 %	24.0 %	28.2 %	32.5 %	36.7 %	40.9 %
	2.0 %	-44.0 %	-39.8 %	-35.6 %	-31.4 %	-27.1 %	-22.9 %	-18.7 %	-14.5 %	-10.2 %	-6.0 %	-1.8 %	2.4 %	6.7 %	10.9 %	15.1 %	19.3 %	23.6 %	27.8 %	32.0 %	36.3 %	40.5 %

The scenario analysis aims to reflect the portfolio's sensitivity to equity and fixed income market movements. Each cell in the table represents the expected portfolio development given the respective market movements. The table is a theoretical calculation and the real portfolio development can differ significantly from the given expectations.

Equity investments' ESG risks

University of Helsinki -
Investment assets
Created: 11.01.2024

Date: 31.12.2023
ESG coverage (of equity
investments)
: 89.6%



ESG risk
Portfolio

20.6

ESG risk
Index

21.3



Carbon footprint
Portfolio

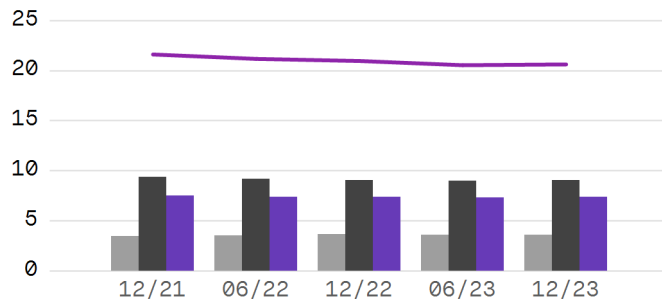
98.5

Carbon footprint
Index

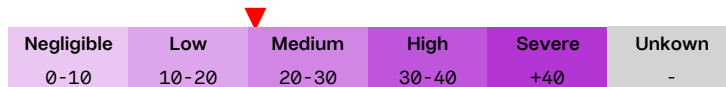
197.8

Total Emissions (metric tons of Co2) / Revenue (Mil USD)

Trend of ESG risk



— Sustainability score ■ Social score
■ Environmental score ■ Governance score



The Sustainability ESG framework aims to identify and address those financial risks that are not handled in a satisfactory way. The portfolio's ESG risk is calculated as a weighted average of the portfolio's investments ESG risks. The common range for portfolio ESG risk is between 15 and 30.

Funds and ETFs with highest ESG-risk scores

	ESG risk	% of equity portfolios' ESG risk	% of equity portfolio	EUR (millions)	ESG risk distribution		
Storebrand Global All Countries A EUR ACC	20.6	23.21%	18.0%	120.5	2	49	42
SEB Global Exposure Fund IC (EUR)	20.4	21.48%	16.8%	112.5	2	50	40
Handelsbanken Global Index Criteria A1 EUR	20.3	22.49%	17.6%	118.3	2	51	41
Vanguard ESG Developed World All Cap Equity Ind EUR Acc	20.3	21.40%	16.8%	112.6	2	50	40

Investments with highest ESG risk, funds' top-30

	ESG risk	% of equity portfolios' ESG risk	% of equity portfolio	EUR (millions)
Meta Platforms Inc	33.7	2.1%	1.3%	6.2
Amazon.com Inc	30.6	1.8%	1.2%	5.7
JPMorgan Chase & Co	29.3	0.6%	0.5%	2.2
Procter & Gamble Co/The	28.6	0.4%	0.3%	1.4
Bank of America Corp	28.3	0.3%	0.2%	1.1

Investments with highest ESG risk, funds' top-30

	ESG risk	% of equity portfolios' ESG risk	% of equity portfolio	EUR (millions)
ASML Holding NV	9.6	0.1%	0.3%	1.2
Accenture PLC	9.8	0.1%	0.2%	0.8
Thermo Fisher Scientific Inc	13.0	0.1%	0.2%	0.9
The Home Depot Inc	13.3	0.2%	0.3%	1.4
NVIDIA Corp	13.6	0.8%	1.2%	5.6

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