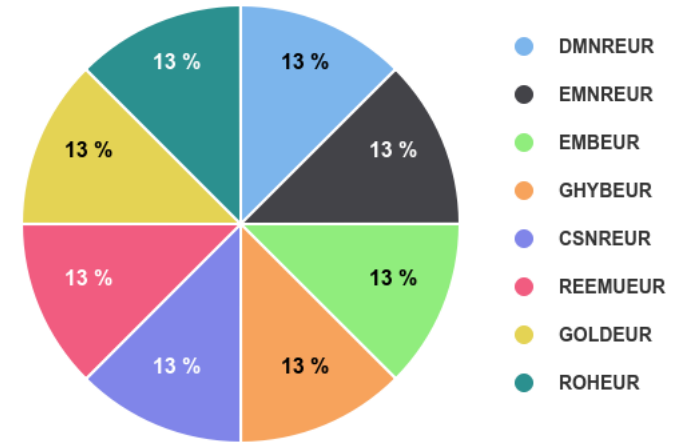


Report Parameters

Start Date	01/01/2001
End Date	11/30/2018
Initial Balance	\$10,000
Periodic Adjustment	None
Rebalancing	Rebalance annually
Reinvest Dividends	Yes

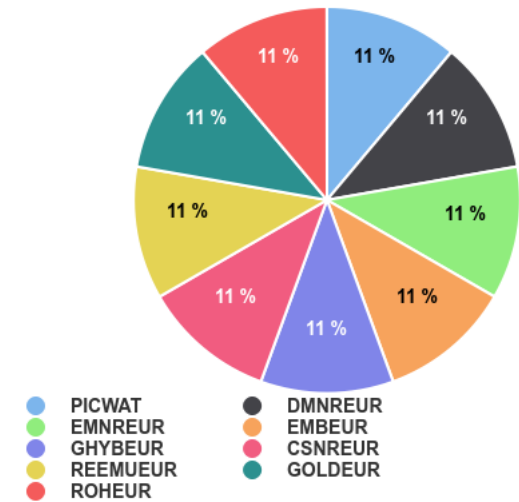
portfolio ohne wasserfonds

Ticker	Name	Allocation
DMNREUR	msci world nr eur	12.50%
EMNREUR	msci em nr eur	12.50%
EMBEUR	emerging markets bonds	12.50%
GHYBEUR	global high yield euro	12.50%
CSNREUR	msci consumer staples nr eur	12.50%
REEMUEUR	msci emu real estate	12.50%
GOLDEUR	gold	12.50%
ROHEUR	rohstoffe	12.50%



portfolio mit wasserfonds

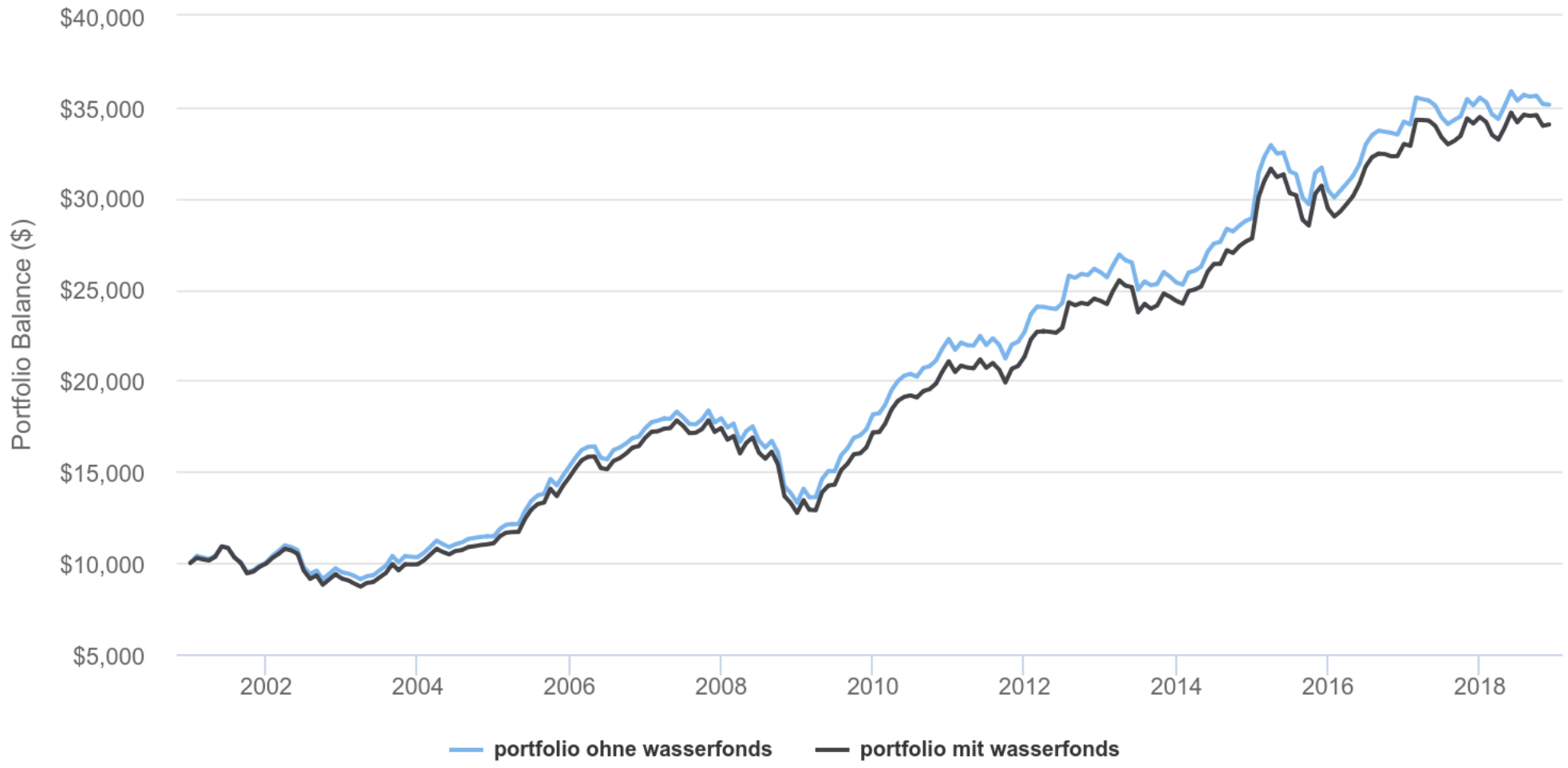
Ticker	Name	Allocation
PICWAT	Pictet Water	11.12%
DMNREUR	msci world nr eur	11.11%
EMNREUR	msci em nr eur	11.11%
EMBEUR	emerging markets bonds	11.11%
GHYBEUR	global high yield euro	11.11%
CSNREUR	msci consumer staples nr eur	11.11%
REEMUEUR	msci emu real estate	11.11%
GOLDEUR	gold	11.11%
ROHEUR	rohstoffe	11.11%



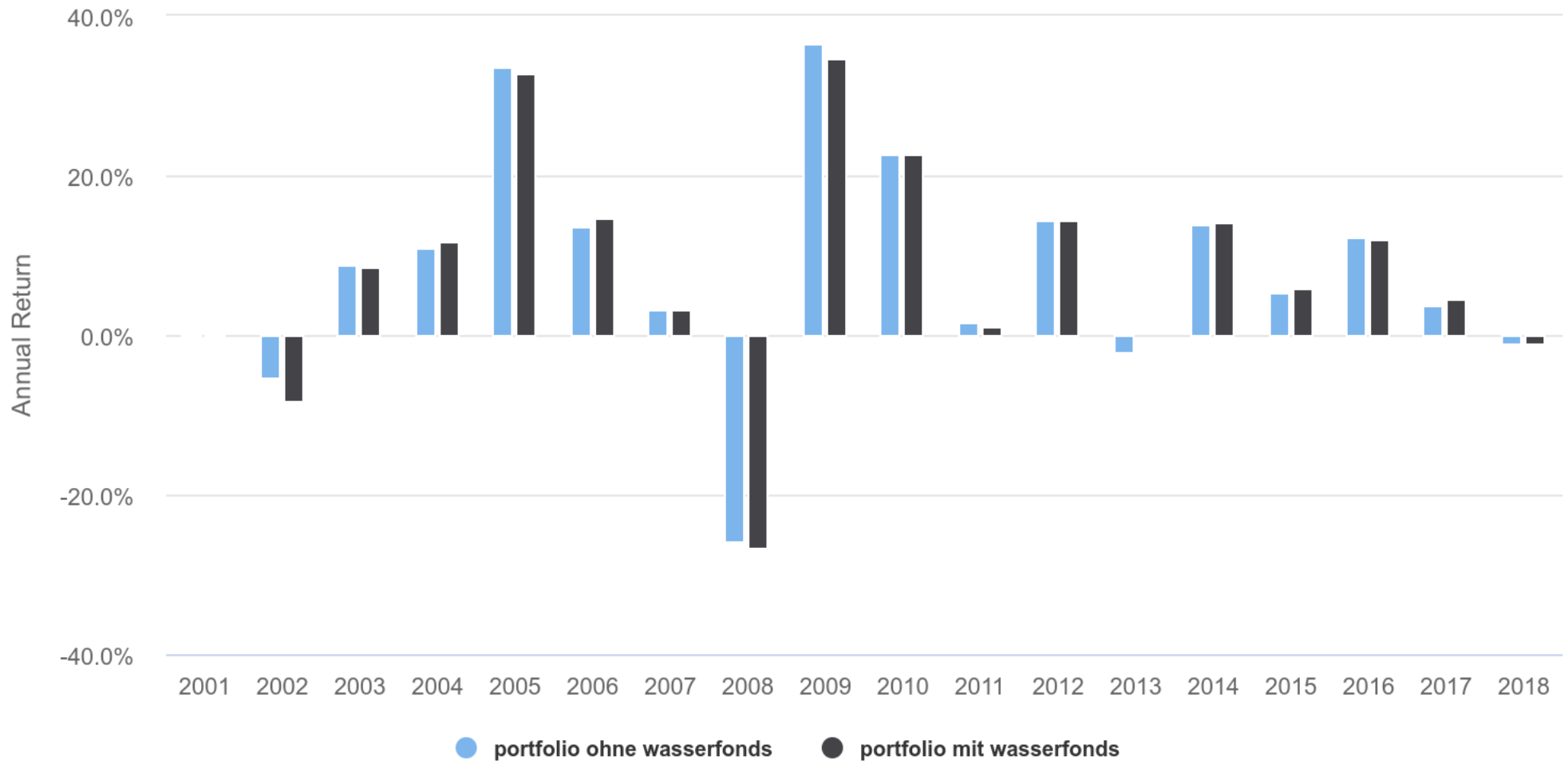
Portfolio Performance

Metric	portfolio ohne wasserfonds	portfolio mit wasserfonds
Start Balance	\$10,000	\$10,000
End Balance	\$35,125	\$34,040
End Balance (inflation adjusted)	\$24,249	\$23,500
CAGR	7.26%	7.08%
CAGR (inflation adjusted)	5.07%	4.88%
Stdev	9.23%	9.39%
Best Year	36.44%	34.65%
Worst Year	-25.82%	-26.73%
Max. Drawdown	-27.55%	-28.49%
Sharpe Ratio	0.66	0.63
Sortino Ratio	1.00	0.94
US Stock Market Correlation	0.57	0.60

Portfolio Growth



Annual Returns



Risk and Return Metrics

Metric	portfolio ohne wasserfonds	portfolio mit wasserfonds
Arithmetic Mean (monthly)	0.62%	0.61%
Arithmetic Mean (annualized)	7.72%	7.55%
Geometric Mean (monthly)	0.59%	0.57%
Geometric Mean (annualized)	7.26%	7.08%
Volatility (monthly)	2.66%	2.71%
Volatility (annualized)	9.23%	9.39%
Downside Deviation (monthly)	1.70%	1.76%
Max. Drawdown	-27.55%	-28.49%
US Market Correlation	0.57	0.60
Beta (*)	0.36	0.39
Alpha (annualized)	4.73%	4.36%
R Squared	32.48%	36.22%
Sharpe Ratio	0.66	0.63
Sortino Ratio	1.00	0.94
Treynor Ratio (%)	16.97	15.38
Calmar Ratio	0.68	0.64
Active Return	0.56%	0.37%
Tracking Error	12.05%	11.69%
Information Ratio	0.05	0.03
Skewness	-0.59	-0.62
Excess Kurtosis	2.20	1.89
Historical Value-at-Risk (5%)	-3.89%	-4.42%
Analytical Value-at-Risk (5%)	-3.83%	-3.93%
Conditional Value-at-Risk (5%)	-5.91%	-6.13%
Upside Capture Ratio (%)	46.96	49.37
Downside Capture Ratio (%)	29.39	34.00
Safe Withdrawal Rate	8.58%	8.26%
Perpetual Withdrawal Rate	5.08%	4.90%
Positive Periods	129 out of 215 (60.00%)	137 out of 215 (63.72%)
Gain/Loss Ratio	1.23	1.03

(*) US stock market is used as the benchmark for calculations. Value-at-risk metrics are based on monthly values.

portfolio ohne wasserfonds Returns

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total	Inflation	Balance
2001	3.81%	-0.72%	-0.96%	1.90%	4.86%	-0.71%	-4.80%	-2.64%	-5.47%	1.24%	2.59%	1.67%	0.19%	1.55%	\$10,019
2002	3.74%	2.42%	2.98%	-0.78%	-1.55%	-8.77%	-3.83%	1.94%	-4.87%	3.28%	3.14%	-2.21%	-5.28%	2.38%	\$9,490
2003	-0.79%	-1.27%	-2.05%	1.85%	0.59%	2.76%	2.76%	5.37%	-3.32%	3.40%	-0.38%	-0.18%	8.72%	1.88%	\$10,317
2004	2.40%	2.89%	3.25%	-1.74%	-1.49%	1.51%	0.87%	1.76%	0.50%	0.44%	0.27%	-0.02%	11.03%	3.26%	\$11,455
2005	3.66%	1.84%	0.32%	-0.02%	6.06%	4.17%	2.27%	0.65%	5.84%	-2.36%	3.79%	3.43%	33.57%	3.42%	\$15,300
2006	3.31%	2.45%	1.05%	0.15%	-3.82%	-0.55%	3.27%	0.91%	1.35%	1.75%	0.49%	2.72%	13.67%	2.54%	\$17,391
2007	1.90%	0.42%	0.71%	-0.14%	2.18%	-1.59%	-2.10%	-0.10%	1.52%	2.74%	-3.60%	1.32%	3.10%	4.08%	\$17,930
2008	-2.82%	1.25%	-5.69%	3.51%	1.53%	-4.45%	-2.25%	2.19%	-3.88%	-11.44%	-2.58%	-3.88%	-25.82%	0.09%	\$13,301
2009	5.75%	-3.34%	0.12%	7.25%	3.03%	-0.09%	5.83%	2.41%	3.52%	0.80%	1.98%	4.72%	36.44%	2.72%	\$18,149
2010	0.32%	2.56%	4.29%	2.52%	1.51%	0.47%	-0.73%	2.35%	0.44%	1.53%	3.05%	2.44%	22.73%	1.50%	\$22,274
2011	-2.64%	1.80%	-0.64%	-0.08%	2.39%	-2.20%	1.66%	-1.55%	-3.43%	3.60%	0.67%	2.40%	1.71%	2.96%	\$22,654
2012	4.37%	1.70%	-0.03%	-0.30%	-0.20%	1.36%	6.17%	-0.43%	0.83%	-0.26%	1.34%	-0.71%	14.50%	1.74%	\$25,939
2013	-1.06%	2.45%	2.33%	-1.13%	-0.48%	-5.62%	1.77%	-0.81%	0.28%	2.56%	-0.92%	-1.27%	-2.17%	1.50%	\$25,376
2014	-0.47%	2.62%	0.42%	0.84%	3.14%	1.61%	0.34%	2.58%	-0.49%	1.15%	0.89%	0.52%	13.89%	0.76%	\$28,901
2015	8.53%	2.88%	1.96%	-1.40%	0.21%	-3.19%	-0.50%	-4.12%	-1.21%	5.81%	0.91%	-3.89%	5.32%	0.73%	\$30,439
2016	-1.31%	1.25%	1.31%	1.34%	2.05%	3.37%	1.59%	0.71%	-0.18%	-0.17%	-0.28%	2.12%	12.35%	2.07%	\$34,196
2017	-0.46%	4.32%	-0.24%	-0.20%	-0.79%	-1.81%	-1.10%	0.68%	0.56%	2.73%	-0.93%	1.17%	3.83%	2.11%	\$35,506
2018	-0.66%	-1.90%	-0.74%	2.07%	2.30%	-1.43%	0.89%	-0.27%	0.15%	-1.28%	-0.10%		-1.07%	1.91%	\$35,125

portfolio mit wasserfonds Returns

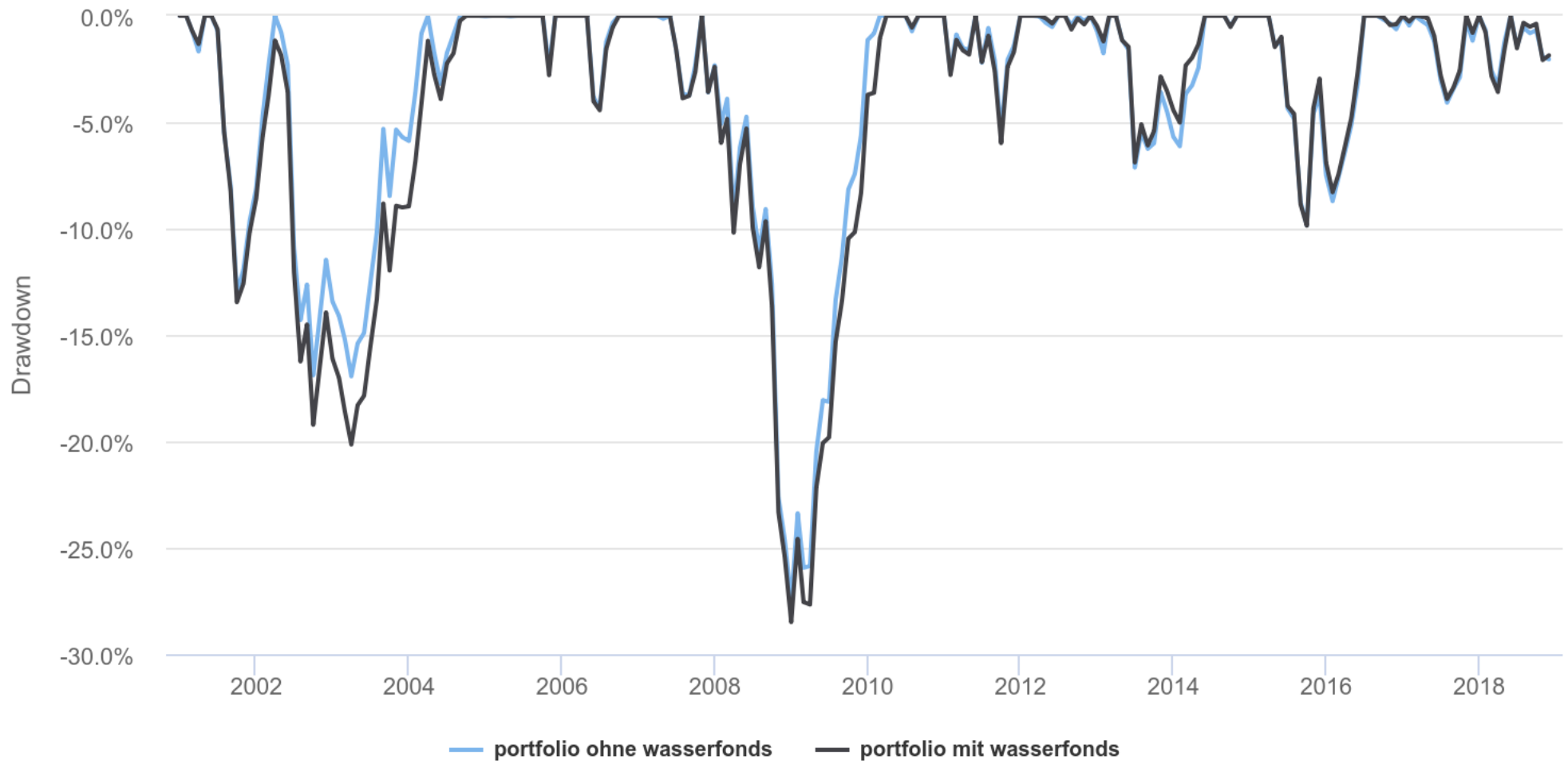
Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total	Inflation	Balance
2001	2.71%	-0.71%	-0.62%	1.96%	5.47%	-0.63%	-4.87%	-2.89%	-5.72%	1.00%	2.76%	1.75%	-0.39%	1.55%	\$9,961
2002	3.20%	2.00%	2.73%	-0.71%	-1.75%	-8.77%	-4.78%	2.07%	-5.51%	3.35%	3.08%	-2.53%	-8.22%	2.38%	\$9,142
2003	-1.07%	-1.91%	-1.90%	2.31%	0.55%	2.81%	2.65%	5.18%	-3.45%	3.45%	-0.07%	0.05%	8.54%	1.88%	\$9,923
2004	2.30%	2.94%	3.07%	-1.60%	-1.19%	1.75%	0.48%	1.56%	0.41%	0.62%	0.33%	0.55%	11.68%	3.26%	\$11,082
2005	3.54%	1.57%	0.35%	0.07%	6.09%	4.12%	2.32%	0.66%	5.59%	-2.79%	4.18%	3.31%	32.73%	3.42%	\$14,709
2006	3.56%	2.62%	1.21%	0.10%	-4.02%	-0.44%	3.02%	1.03%	1.59%	2.01%	0.49%	2.82%	14.69%	2.54%	\$16,870
2007	1.93%	0.09%	0.85%	0.18%	2.41%	-1.56%	-2.35%	0.12%	1.17%	2.78%	-3.59%	1.23%	3.11%	4.08%	\$17,394
2008	-3.66%	1.19%	-5.61%	3.59%	1.79%	-4.91%	-2.06%	2.44%	-4.41%	-11.20%	-2.75%	-4.10%	-26.73%	0.09%	\$12,744
2009	5.46%	-3.93%	-0.16%	7.60%	2.68%	0.34%	5.59%	2.32%	3.35%	0.34%	2.05%	5.03%	34.65%	2.72%	\$17,160
2010	0.10%	2.67%	4.42%	2.56%	1.18%	0.38%	-0.55%	1.84%	0.52%	1.56%	3.28%	2.79%	22.69%	1.50%	\$21,054
2011	-2.78%	1.69%	-0.49%	-0.20%	2.36%	-2.18%	1.26%	-1.71%	-3.44%	3.81%	0.71%	2.43%	1.18%	2.96%	\$21,303
2012	4.49%	1.84%	0.15%	-0.11%	-0.25%	1.23%	6.06%	-0.64%	0.52%	-0.28%	1.25%	-0.47%	14.41%	1.74%	\$24,371
2013	-0.73%	2.89%	2.42%	-1.15%	-0.31%	-5.51%	1.92%	-1.04%	0.73%	2.70%	-0.68%	-0.95%	-0.02%	1.50%	\$24,366
2014	-0.62%	2.83%	0.38%	0.64%	3.25%	1.62%	0.02%	2.81%	-0.53%	1.41%	0.89%	0.65%	14.09%	0.76%	\$27,798
2015	8.10%	3.01%	2.14%	-1.47%	0.48%	-3.28%	-0.38%	-4.46%	-1.09%	6.11%	1.46%	-4.06%	5.89%	0.73%	\$29,435
2016	-1.49%	0.95%	1.43%	1.42%	2.30%	3.03%	1.63%	0.57%	-0.07%	-0.36%	0.03%	2.03%	11.99%	2.07%	\$32,965
2017	-0.28%	4.32%	-0.03%	-0.08%	-0.84%	-1.84%	-1.17%	0.57%	0.82%	2.86%	-0.80%	1.03%	4.49%	2.11%	\$34,446
2018	-0.78%	-2.07%	-0.77%	1.97%	2.42%	-1.53%	1.21%	-0.18%	0.14%	-1.71%	0.22%		-1.18%	1.91%	\$34,040

Portfolio Returns Based Style Analysis

Style Category	portfolio ohne wasserfonds	portfolio mit wasserfonds
Large-cap Value	0.00%	0.00%
Large-cap Growth	3.51%	5.48%
Mid-cap Value	3.77%	5.38%
Mid-cap Growth	20.50%	21.03%
Small-cap Value	0.00%	0.00%
Small-cap Growth	0.00%	0.00%
Global ex-US Developed Markets	0.00%	0.00%
Emerging Markets	8.14%	6.63%
Corporate Bonds	9.75%	9.30%
Long-Term Treasuries	0.04%	0.84%
Intermediate-Term Treasuries	3.27%	0.00%
Short-Term Treasuries	51.01%	51.33%
R Squared	36.01%	38.93%

Style analysis is based on monthly returns from Apr 2005 to Nov 2018 and uses total portfolio return with monthly rebalancing. Returns based style analysis aims to explain the portfolio returns based on asset class exposures, it does not identify the actual portfolio holdings.

Drawdowns



Drawdowns for Historical Market Stress Periods

Stress Period	Start	End	portfolio ohne wasserfonds	portfolio mit wasserfonds
Subprime Crisis	Nov 2007	Mar 2009	-27.55%	-28.49%

Drawdowns für portfolio ohne wasserfonds (worst 10)

Rank	Start	End	Length	Recovery By	Recovery Time	Underwater Period	Drawdown
1	Nov 2007	Dec 2008	1 year 2 months	Feb 2010	1 year 2 months	2 years 4 months	-27.55%
2	Apr 2002	Mar 2003	1 year	Mar 2004	1 year	2 years	-16.94%
3	Jun 2001	Sep 2001	4 months	Mar 2002	6 months	10 months	-13.01%
4	Apr 2015	Sep 2015	6 months	Jun 2016	9 months	1 year 3 months	-9.85%
5	Apr 2013	Jun 2013	3 months	May 2014	11 months	1 year 2 months	-7.13%
6	Jun 2011	Sep 2011	4 months	Dec 2011	3 months	7 months	-5.47%
7	May 2006	Jun 2006	2 months	Sep 2006	3 months	5 months	-4.35%
8	Mar 2017	Jul 2017	5 months	May 2018	10 months	1 year 3 months	-4.08%
9	Jun 2007	Aug 2007	3 months	Oct 2007	2 months	5 months	-3.75%
10	Apr 2004	May 2004	2 months	Aug 2004	3 months	5 months	-3.20%

Drawdowns für portfolio mit wasserfonds (worst 10)

Rank	Start	End	Length	Recovery By	Recovery Time	Underwater Period	Drawdown
1	Nov 2007	Dec 2008	1 year 2 months	Mar 2010	1 year 3 months	2 years 5 months	-28.49%
2	Jun 2001	Mar 2003	1 year 10 months	Sep 2004	1 year 6 months	3 years 4 months	-20.14%
3	Apr 2015	Sep 2015	6 months	Jun 2016	9 months	1 year 3 months	-9.86%
4	Apr 2013	Jun 2013	3 months	May 2014	11 months	1 year 2 months	-6.89%
5	Jun 2011	Sep 2011	4 months	Dec 2011	3 months	7 months	-5.98%
6	May 2006	Jun 2006	2 months	Sep 2006	3 months	5 months	-4.44%
7	Mar 2017	Jul 2017	5 months	Oct 2017	3 months	8 months	-3.91%
8	Jun 2007	Jul 2007	2 months	Oct 2007	3 months	5 months	-3.88%
9	Jan 2018	Mar 2018	3 months	May 2018	2 months	5 months	-3.58%
10	Oct 2005	Oct 2005	1 month	Nov 2005	1 month	2 months	-2.79%

Portfolio Components

Name	CAGR	Stdev	Best Year	Worst Year	Max DD	Sharpe Ratio	Sortino Ratio	US Mkt Correlation
msci world nr eur	3.80%	13.47%	26.17%	-37.67%	-49.17%	0.24	0.33	0.82
msci em nr eur	7.73%	19.24%	72.97%	-50.92%	-56.24%	0.41	0.61	0.71
emerging markets bonds	6.89%	10.41%	28.22%	-10.27%	-20.73%	0.56	0.90	0.08
global high yield euro	7.04%	10.20%	54.38%	-23.05%	-29.97%	0.58	0.94	0.33
msci consumer staples nr eur	6.26%	10.64%	22.16%	-19.39%	-32.99%	0.50	0.74	0.40
msci emu real estate	8.82%	18.76%	54.37%	-53.38%	-70.68%	0.47	0.70	0.58
gold	7.59%	16.24%	36.60%	-30.92%	-37.03%	0.45	0.75	-0.19
rohstoffe	3.29%	13.49%	57.40%	-25.07%	-42.32%	0.21	0.30	0.23
Pictet Water	5.10%	13.31%	26.04%	-34.04%	-46.60%	0.34	0.47	0.67

Portfolio Return Decomposition

Name	portfolio ohne wasserfonds	portfolio mit wasserfonds
msci world nr eur		\$3,122
msci em nr eur		\$3,820
emerging markets bonds		\$3,068
global high yield euro		\$3,373
msci consumer staples nr eur		\$3,639
msci emu real estate		\$4,320
gold		\$2,983
rohstoffe		\$800
Pictet Water		\$2,707

Portfolio Risk Decomposition

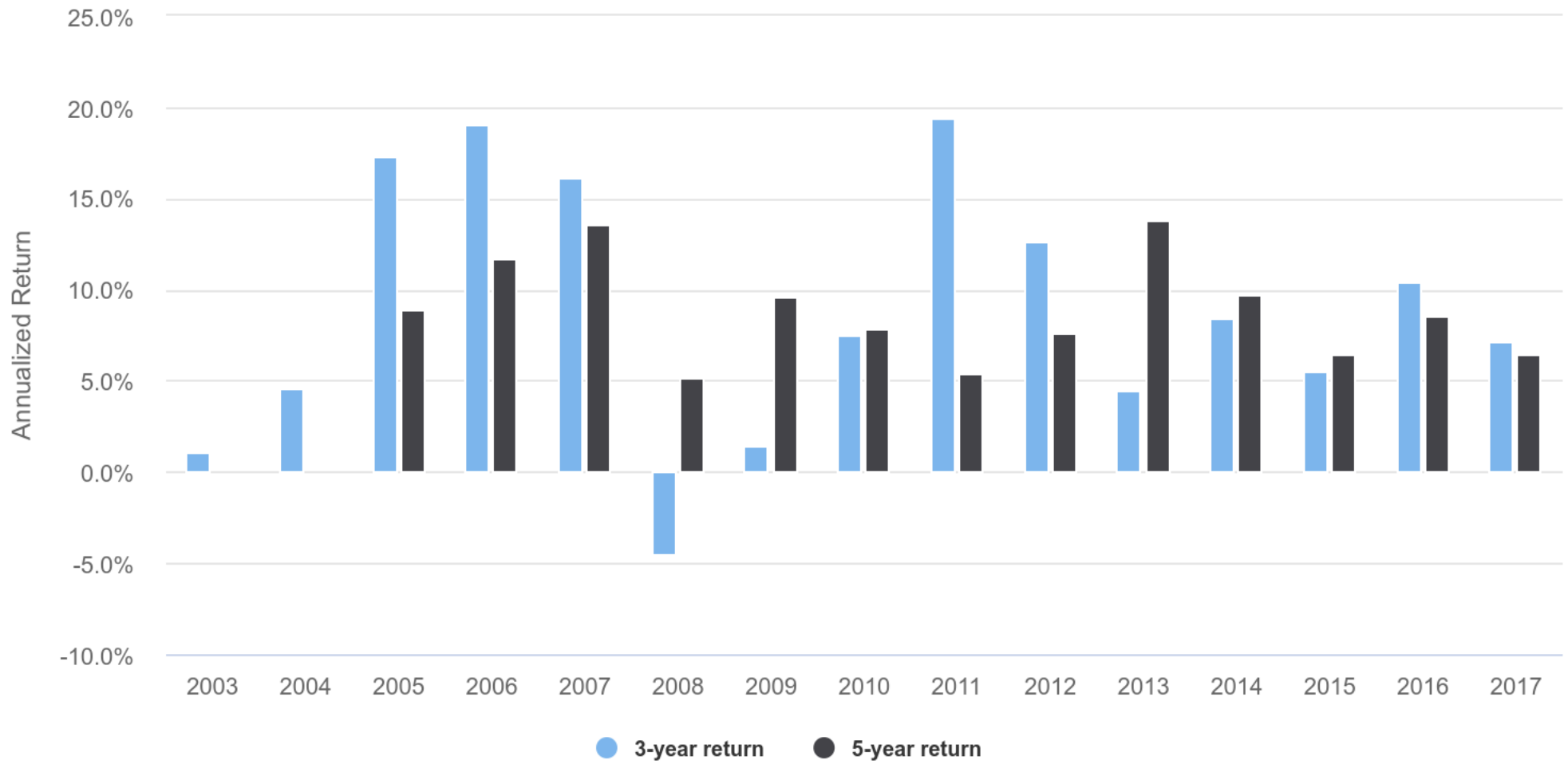
Name	portfolio ohne wasserfonds	portfolio mit wasserfonds
msci world nr eur	14.51%	13.13%
msci em nr eur	21.28%	18.66%
emerging markets bonds	9.74%	8.39%
global high yield euro	10.81%	9.40%
msci consumer staples nr eur	9.55%	8.66%
msci emu real estate	15.25%	13.37%
gold	8.20%	6.43%
rohstoffe	10.67%	8.93%
Pictet Water		13.03%

Rolling Returns

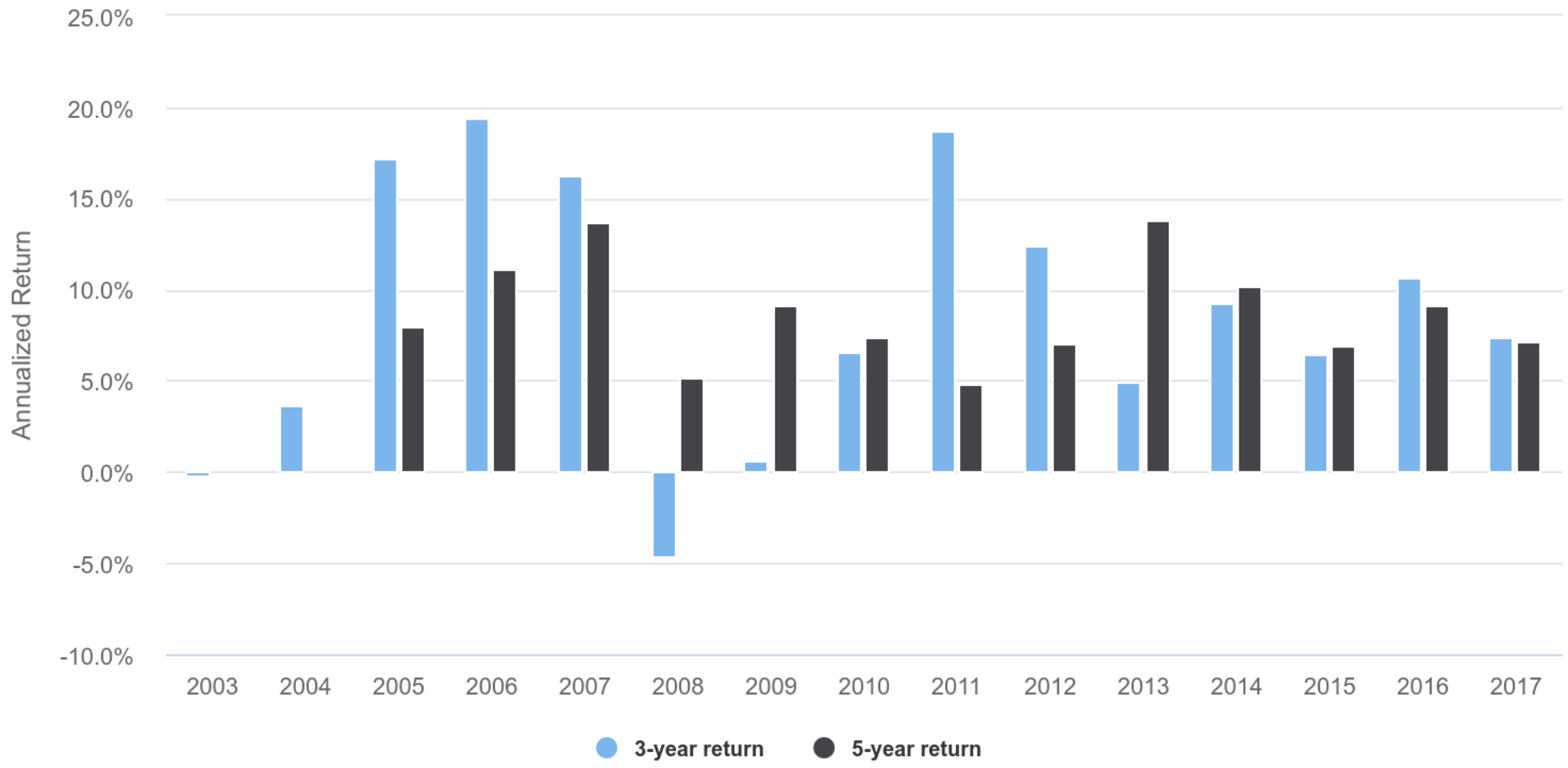
Roll Period	portfolio ohne wasserfonds			portfolio mit wasserfonds		
	Average	High	Low	Average	High	Low
1 year	8.69%	36.44%	-25.82%	8.52%	34.65%	-26.73%
3 years	8.69%	19.42%	-4.56%	8.56%	19.35%	-4.67%
5 years	8.84%	13.79%	5.21%	8.73%	13.84%	4.78%
7 years	8.52%	12.55%	4.13%	8.36%	12.70%	3.58%
10 years	8.46%	10.58%	7.00%	8.27%	10.30%	6.93%
15 years	8.48%	9.20%	7.70%	8.34%	9.25%	7.46%

Result statistics are based on annualized rolling returns over full calendar year periods

portfolio ohne wasserfonds Rolling Returns



portfolio mit wasserfonds Rolling Returns



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