SAFEHARBOR - Risk Report - January 21, 2026

Key figures

31-Dec-2025
Reporting Date

VaR 5.0%
10d@99.9%

6.6%
Volatility p.a.

1006 kEUR
Base Value

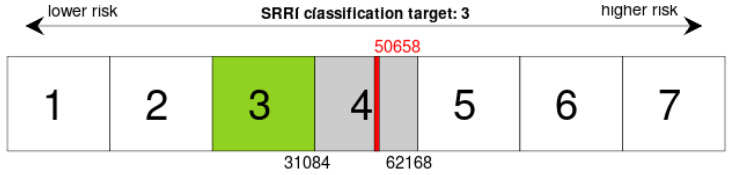
50658 EUR
VaR (abs.)

23.3%
Diversification

Key Risk Indicators

Category	Measure	Target	Actual	Status
Risk	SRRI class	3	4	action required
Risk	VaR Trend	→	→	on track
Allocation	Total Deviation	< 10%	1%	on track
Allocation	Risk Impact	< 10%	0%	on track
Allocation	Equity Deviation	< 10%	16%	action required
Allocation	Cash	> 0 EUR	2000 EUR	on track
Risk	Country Risk	(very) low	low	on track
Risk	ESG Rating	AAA-A	A	on track
Risk	Concentration	low-mid	very high	action required
Allocation	Liquidity	high: > 50%	high: 95%	on track

Portfolio Risk Classification



Comments and Assumptions

Notably the following assumptions are made:

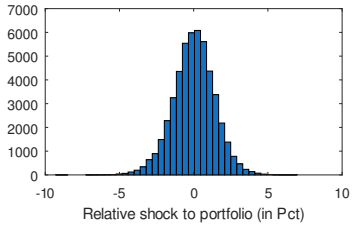
- Runcode for report: 20251231
- Low volatility portfolio for retirees. Bond ladder provides predictable income.

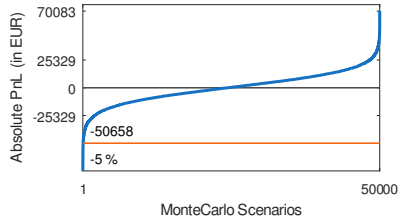
Tax impact

VaR after tax	VaR before Tax	Tax benefit	Tax benefit (rel.)	DTL
50658 EUR	50658 EUR	0 EUR	0.0%	0 EUR

Portfolio Risk Distribution

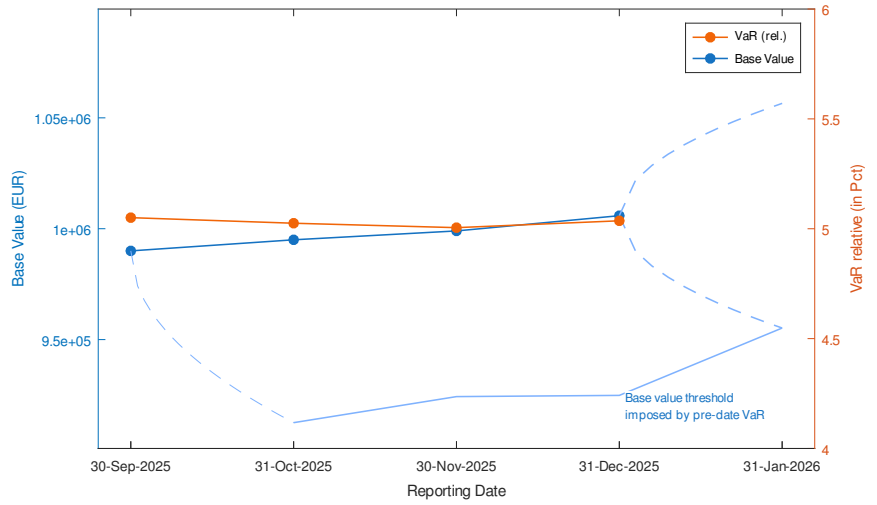
Visualization of profit and loss distribution in all MC scenarios:





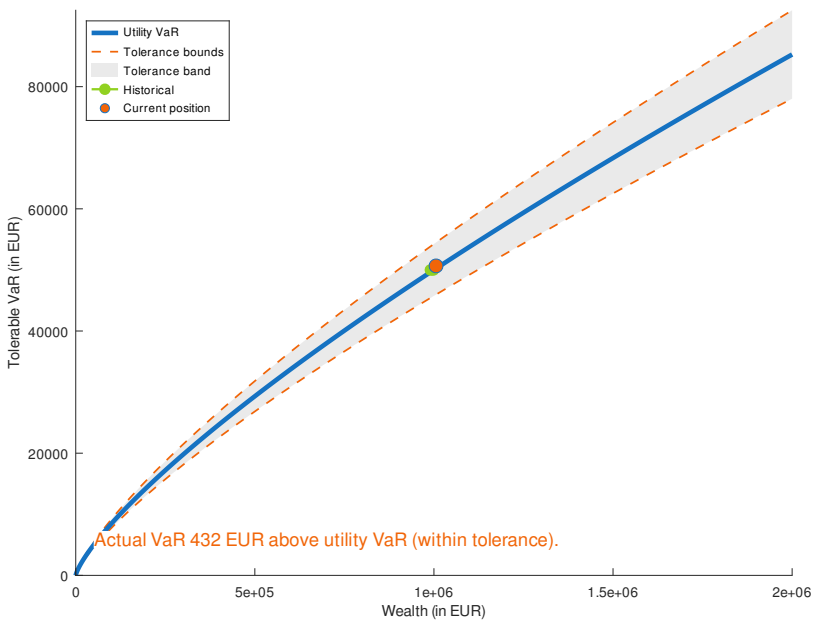
VaR Evolution and Backtesting

A history of portfolio basevalues and relative VaR for past reporting dates is given. The light blue line indicates the lower base value threshold as imposed by pre-date VaR:



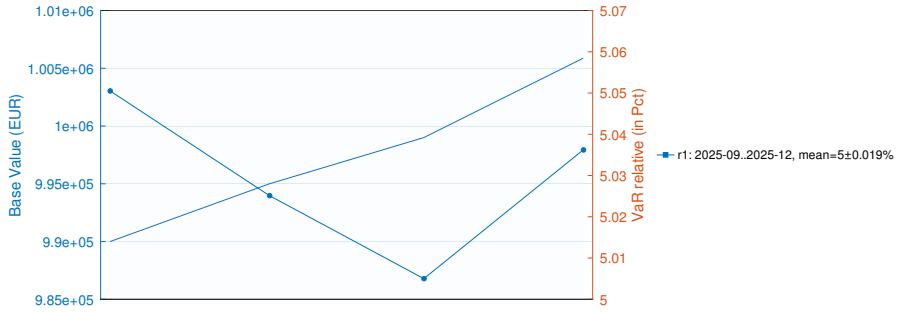
VaR Utility Function

Actual VaR is compared to utlity VaR calibrated by individual logarithmic utility function:



Historical VaR Regimes

Plot full historical monthly VaR with regime color coding:



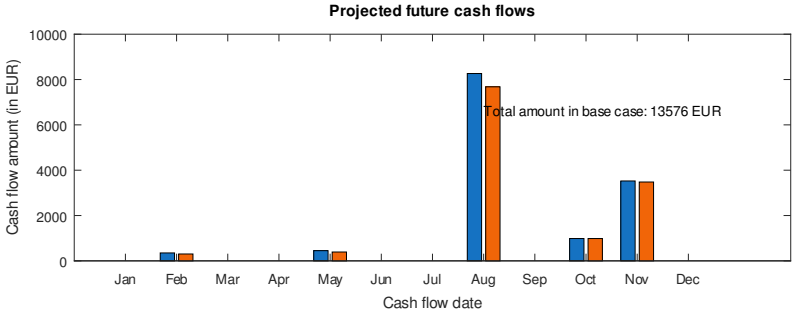
Strategic Asset Allocation

Comparison of portfolio target asset allocation (AA) vs. actual allocation. An estimation of VaR impact induced by the deviation is given both on portfolio and asset class level:

Asset Class	Basevalue	Target AA	Actual AA	Deviation	Risk Impact
Equity	200010 EUR	20.0%	19.9%	-1165 EUR	-175 EUR
Fixed Income	702050 EUR	70.0%	69.8%	-2061 EUR	-28 EUR
Real Estate	50011 EUR	5.0%	5.0%	-283 EUR	-38 EUR
Commodity	51802 EUR	5.0%	5.1%	1508 EUR	130 EUR
Cash	2000 EUR	0.0%	0.2%	2000 EUR	-0 EUR
Assets	1005872 EUR	100%	100%	7016 EUR	-110 EUR

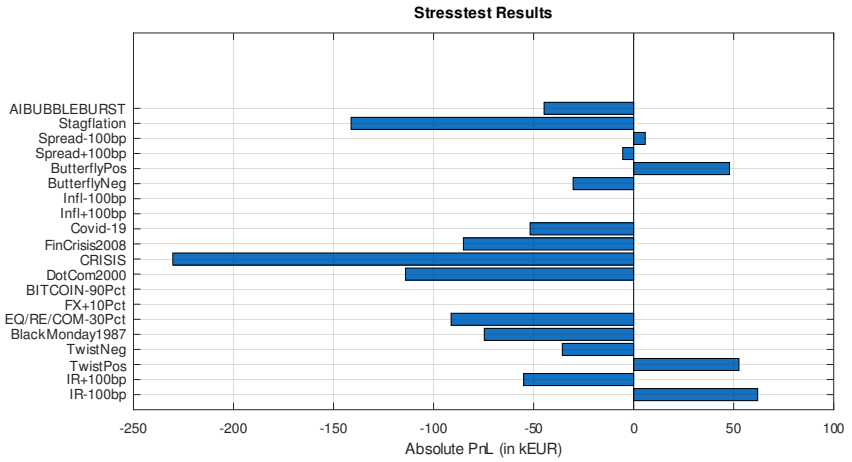
Liquidity Projection

Future cash flows from the portfolio including income, expenses, dividends and coupon payments for the next 12 month are forecast to allow for reinvesting planing. Base scenario cash flows are shown in blue, while the cash flows at risk are given in red:



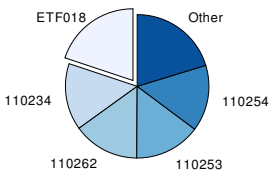
Stress Testing

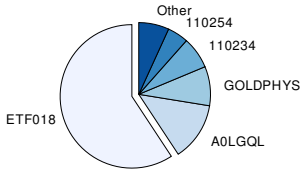
Portfolio profit and losses for both parametric and historic stress scenarios:



Largest and Riskiest Positions

Main position contributions to portfolio basevalue (left chart) and portfolio VaR (right chart):





Asset Class and Currency Decomposition

Portfolio risk breakdown into asset classes (AC), currencies and their VaR decomposition:

AC / Currency	Basevalue	Pct.	Standalone VaR	Decomp VaR	Pct.
Portfolio	1005872 EUR	100.0%	50658 EUR	50658 EUR	100.0%
Equity	200010 EUR	19.9%	33941 EUR	30023 EUR	59.3%
Fixed Income	702050 EUR	69.8%	17334 EUR	9480 EUR	18.7%
Real Estate	50011 EUR	5.0%	8329 EUR	6675 EUR	13.2%
Commodity	51802 EUR	5.1%	5507 EUR	4480 EUR	8.8%
Cash	2000 EUR	0.2%	0 EUR	-0 EUR	-0.0%
EUR	1005872 EUR	100.0%	50658 EUR	50658 EUR	100.0%

Position Decomposition

Portfolio breakdown of the riskiest positions and their VaR decomposition:

Position ID	Basevalue	Standalone VaR	Decomp VaR	Pct.	SRRI
Portfolio	1005872 EUR	50658 EUR	50658 EUR	100.0%	4
ETF018	200010 EUR	33941 EUR	30023 EUR	59.3%	6
A0LGQL	50011 EUR	8329 EUR	6675 EUR	13.2%	6
GOLDPHYS	51802 EUR	5507 EUR	4480 EUR	8.8%	5
110234	151600 EUR	6799 EUR	3629 EUR	7.2%	4
110254	149951 EUR	4505 EUR	2395 EUR	4.7%	4
A2BPA5	100198 EUR	3045 EUR	1390 EUR	2.7%	3
110253	149985 EUR	2244 EUR	1190 EUR	2.3%	3
110262	150315 EUR	1649 EUR	874 EUR	1.7%	2
CASHEUR	2000 EUR	-0 EUR	-0 EUR	-0.0%	1
Other	0 EUR	–	0 EUR	0.0%	–

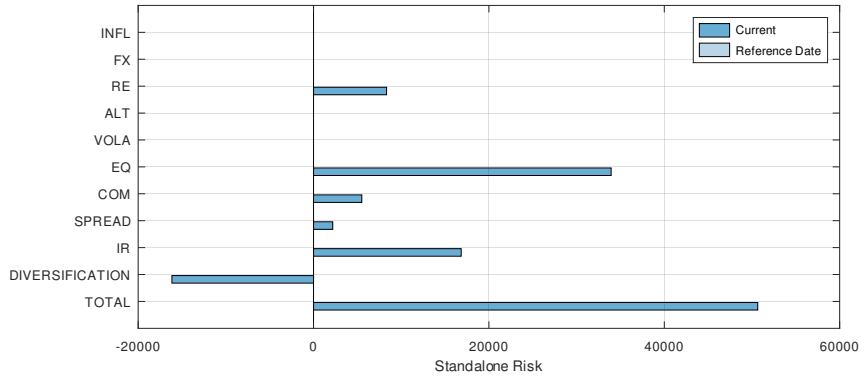
Diversified and Standalone Risk

Risk breakdown into diversified and standalone risk components:

Risk Capital 10d @99.9% (in EUR)	12/25 base	11/25 base	Diff
Total diversified risk after tax and add-on	50658	0	+50658
Capital add-on	0	0	+0
Total diversified risk after tax	50658	0	+50658
Loss absorbing capacity of deferred taxes	0	0	+0
Total diversified risk before tax	50658	0	+50658
Diversification impact	-16151	0	-16151
Diversification benefit	-24.18%	0.00%	+24.18%-p.
Sum of standalone risks	66809	0	+66809
Interest rate risk	16841	0	+16841
Volatility risk	-0	0	-0
Inflation risk	-0	0	-0
Equity risk	33941	0	+33941
Alternative risk	-0	0	-0
Real Estate risk	8329	0	+8329
Currency risk	-0	0	-0
Commodity risk	5507	0	+5507
Credit risk sum (spread & default)	2191	0	+2191

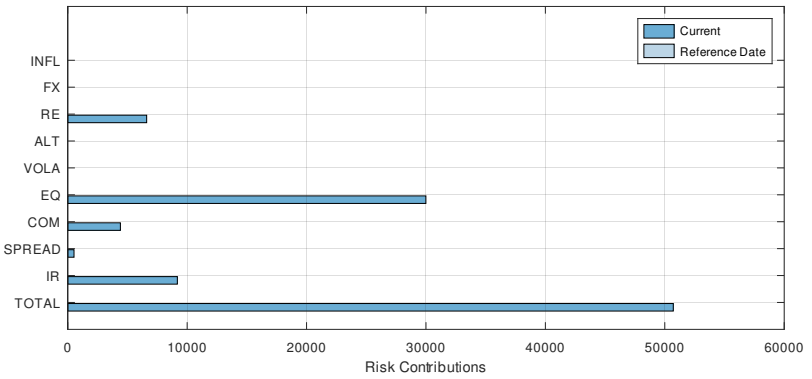
Standalone Risk

Graphical representation of standalone risk components:



Risk Contribution

Graphical representation of standalone risk contributions:



What-If Analysis

The incremental VaR measures the effect of positions on the portfolio VaR after an initial hypothetical investment, while the marginal VaR calculates the change in the portfolio VaR when an additional 1000EUR is invested into the position (or when divested):

Position ID	Basevalue	Incremental VaR	Marginal VaR
ETF018	200010 EUR	26718 EUR	150 EUR
A0LGQL	50011 EUR	6549 EUR	134 EUR
GOLDPHYS	51802 EUR	4219 EUR	87 EUR
110234	151600 EUR	3604 EUR	24 EUR
110254	149951 EUR	2391 EUR	16 EUR
A2BPA5	100198 EUR	1347 EUR	14 EUR
110253	149985 EUR	1147 EUR	8 EUR
110262	150315 EUR	842 EUR	6 EUR
CASHEUR	2000 EUR	0 EUR	0 EUR

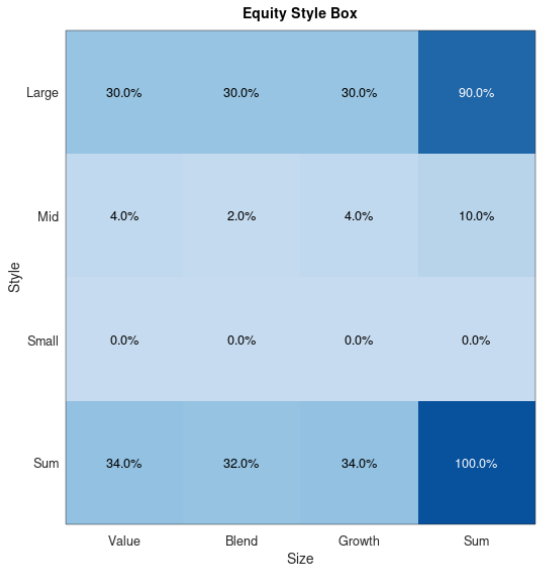
Equity Region Allocation

Comparison of equity target asset allocation (AA) vs. actual allocation. An estimation of VaR impact induced by the deviation is given both on equity asset class and region level:

Region	Basevalue	Target AA	Actual AA	Deviation	Risk Impact
Europe	40002 EUR	15.0%	20.0%	10000 EUR	1501 EUR
NorthAmerica	134007 EUR	70.0%	67.0%	-6000 EUR	-901 EUR
Pacific	26001 EUR	10.0%	13.0%	6000 EUR	901 EUR
EmergingMarkets	0 EUR	5.0%	0.0%	-10000 EUR	NaN EUR
Equity	200010 EUR	100.0%	100.0%	32002 EUR	1501 EUR

Equity Style Allocation

Allocation size (large/mid/small cap) vs. style (value/blend/growth) for all equity positions:



Fixed Income Style Allocation

The allocation of ratings and the effective duration, divided into three buckets, are provided for all fixed income asset positions:

Sensitivity	Overall Portfolio
Effective Duration	5.8
Effective Convexity	69.6

Asset Credit Rating	Allocation	Eff. Duration	Asset Allocation
High (AAA-AA)	85.8%	Low<3	0.0%
Mid (A-BBB)	14.2%	Mid3-7	57.0%
Low (BB-C)	0.0%	High>7	43.0%
Sum	100.0%	Sum	100.0%

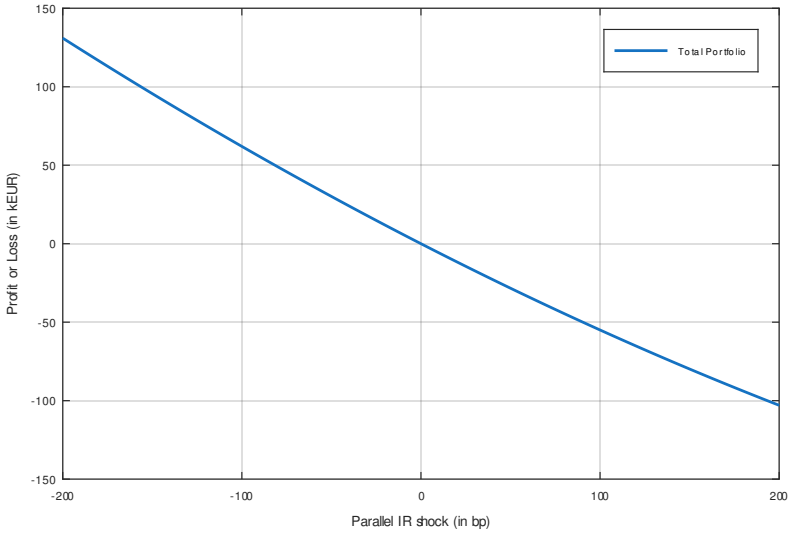
Instrument Name	Identifier	Exposure	Notional	Maturity Date
BUND 22/29	110262	150315 EUR	151200 EUR	2029-11-15
BUND 02/31	110253	149985 EUR	169100 EUR	2031-02-15
BASF SE 2031	A2BPA5	100198 EUR	112600 EUR	2031-10-06
Bund 05/36	110254	149951 EUR	201900 EUR	2036-05-15
Bund 08/46	110234	151600 EUR	172600 EUR	2046-08-15

Bond Yield-to-Maturity

Portfolio bond exposure, yield-to-maturity and effective duration are given:

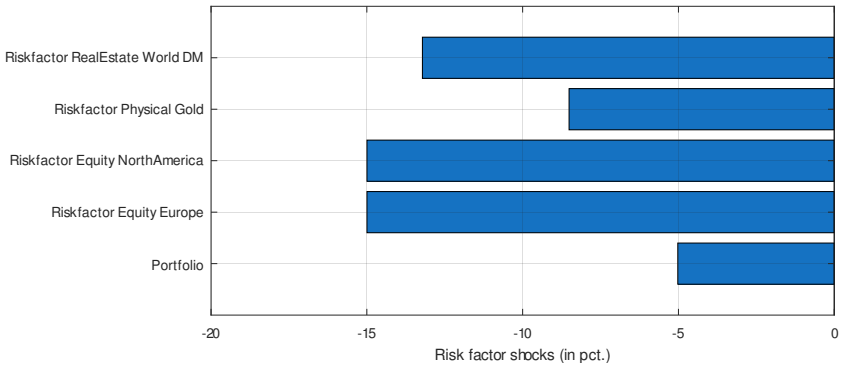
Bond Exp.	Yield to Mat.	Eff.Dur.
702050 EUR	2.79%	8.33

IR Sensitivity Analysis

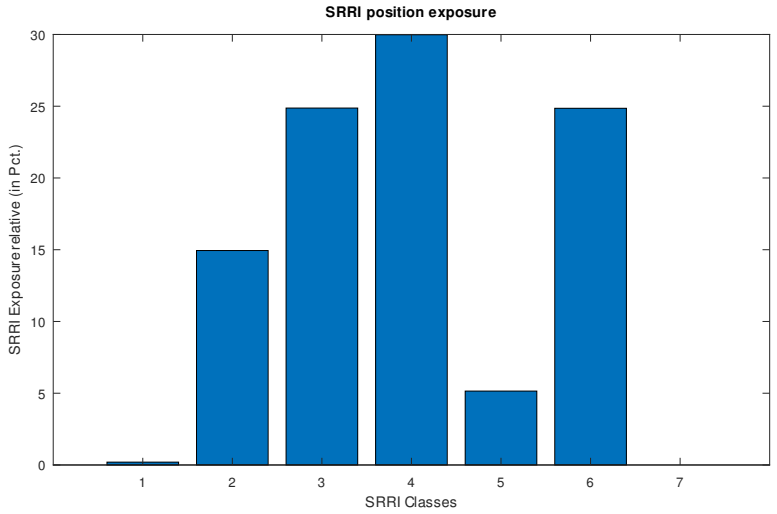


VaR Risk Factor Shocks

Average tail scenario shocks in MC VaR scenarios for selected equity, forex, alternative, commodity and real estate risk factors are shown:

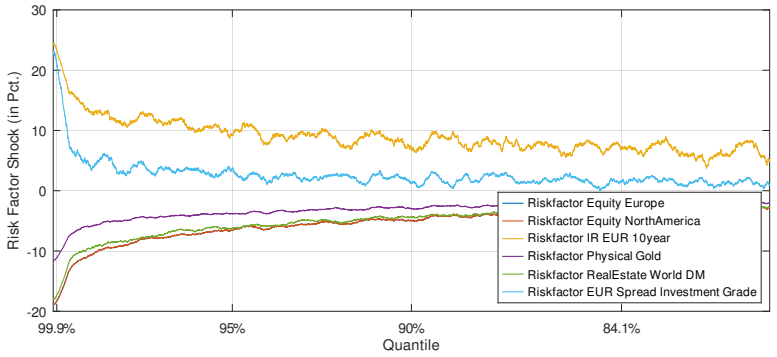


SRRI Asset Position Exposure



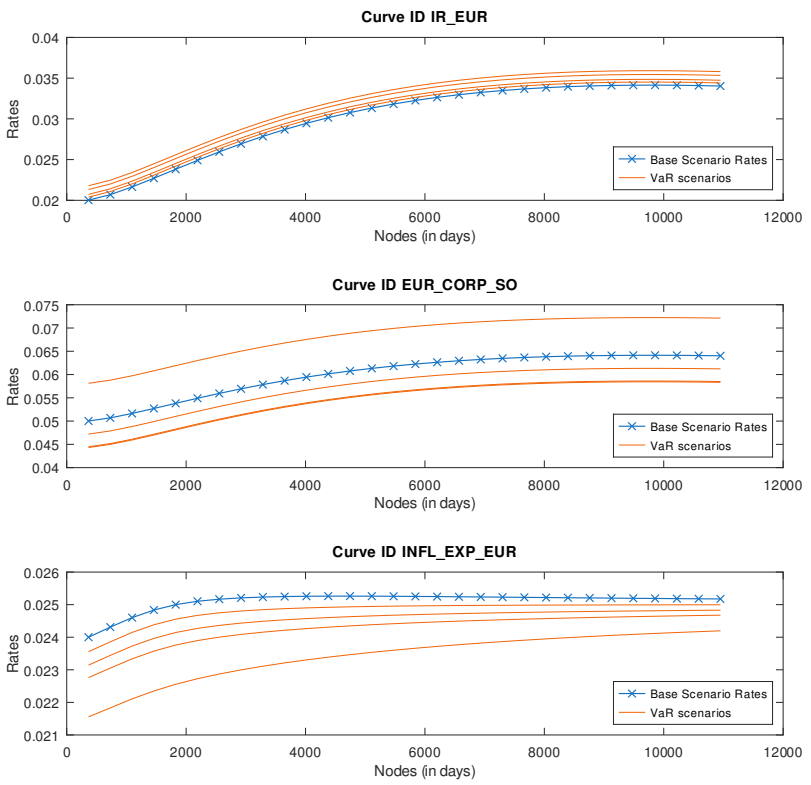
Risk Factor Quantile Dependence

Tail shocks for selected interest rates, equity, alternative, commodity and real estate risk factors are shown. Most relevant quantiles (e.g. VaR 99.9% or Standard Deviation 84.1%) allow for analysis of exposure transitions.



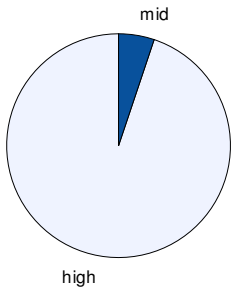
Interest Rate and Inflation Term Structure

A summary of risk free interest rate and inflation expectation term structures under current market conditions as well as in selected tail scenarios show portfolio interest rate sensitivity:



Liquidity Classification

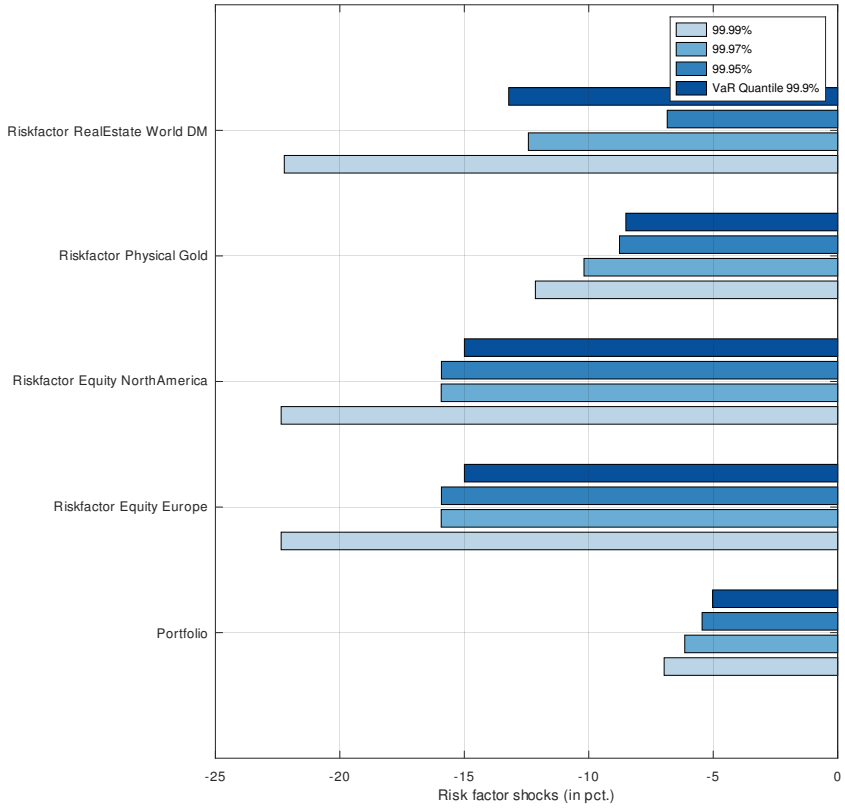
Exposure of all financial assets to the three liquidity classes high, mid and low:



high	tradeable within one day (e.g. cash, ETF or bonds/stocks traded via exchange)
mid	tradeable within one week (e.g. physical commodities or savings account)
low	tradeable within more than one week and / or penalty for termination of contract (e.g. pension scheme)

Reverse Stress Testing

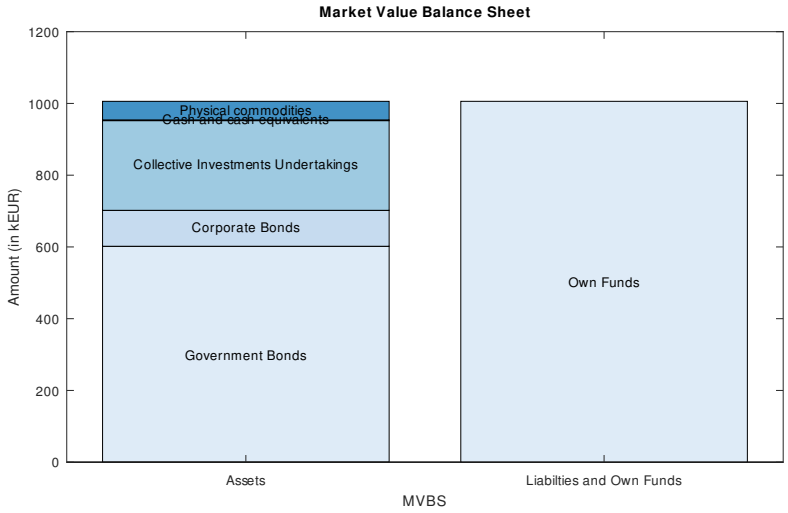
Reverse stress testing looks at specific scenario shocks, which exceeds given limits. In order to determine such extreme shock events which will exceed VaR, MC tail scenarios based on VaR, 99.95%, 99.97% and 99.99% quantiles for certain risk factors are analyzed. For comparison purposes the portfolio VaR shock itself is included.



Market Value Balance Sheet (MVBS)

Assets	in EUR
Investments	952071
Bonds	702050
Government Bonds	601851
Corporate Bonds	100198
Collective Investments Undertakings	250021
Cash and cash equivalents	2000
Physical commodities	51802
Total Assets	1005872

Own Funds	
Own Funds before tax	1005872
Deferred tax	0
Own Funds after tax	1005872



Global Economic Stress Scenarios

A global risk is defined as an uncertain event or condition that, if it occurs, can cause significant negative impact for several countries or industries within the next 10 years. The economic risk scenarios are taken from the Global Risk Report as published by the World Economic Forum (www.weforum.org/reports/the-global-risks-report-2019). A possible qualitative risk mitigation approach is added to each of the scenarios:

Asset bubbles in a major economy Unsustainably overpriced assets such as commodities, housing, shares, etc. in a major economy or region → can be mitigated through diversification and limit setting.

Deflation in a major economy Prolonged near-zero inflation or deflation in a major economy or region → can be mitigated through global diversification and investing in e.g. commodities and crypto-currencies.

Failure of a major financial mechanism or institution Collapse of a financial institution and/or malfunctioning of a financial system that impacts the global economy → can be mitigated through reduction of concentration risks (diversification of financial counterparties and understanding of underlying instrument mechanisms).

Failure/shortfall of critical infrastructure Failure to adequately invest in, upgrade and/or secure infrastructure networks (e.g. energy, transportation and communications), leading to pressure or a breakdown with system-wide implication → see last item

Fiscal crises in key economies Excessive debt burdens that generate sovereign debt crises and/or liquidity crises → can be minimized through (regional) diversification

High structural unemployment A sustained high level of unemployment or underutilization of the productive capacity of the employed population → can be minimized through (regional) diversification

Illicit trade Large-scale activities outside the legal framework such as illicit financial flows, tax evasion, human trafficking, counterfeiting and/or organized crime that undermine social interactions, regional or international collaboration, and global growth → can be minimized through (regional) diversification

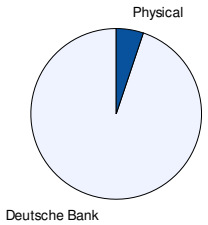
Severe energy price shock Significant energy price increases or decreases that place further economic pressures on highly energy-dependent industries and consumers → can be minimized through (regional) diversification and investment into commodities and alternative assets

Unmanageable inflation Unmanageable increases in the general price levels of goods and services in key economies → can be minimized through (regional) diversification and investment in e.g. equity assets and gold

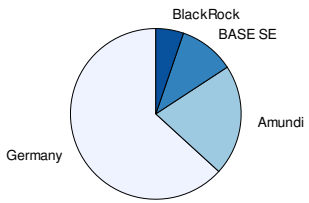
Concentration Risk Charts

Pie charts for all entities clusterd by topic highlight concentration risk of portfolio. Hirschmann-Herfindahl Index (HHI) gives indication of concentration level:

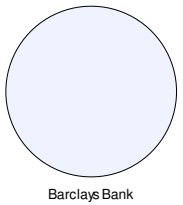
Custodian (HHI = 9023)



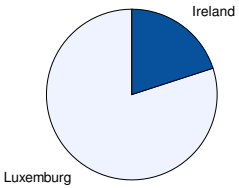
Issuer (HHI = 4576)



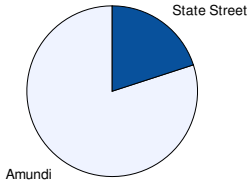
Counterparty (HHI = 10000)



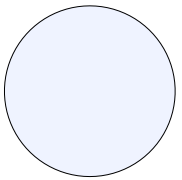
Country of Origin (HHI = 6800)



Custodian Bank Underlying (HHI = 6800)

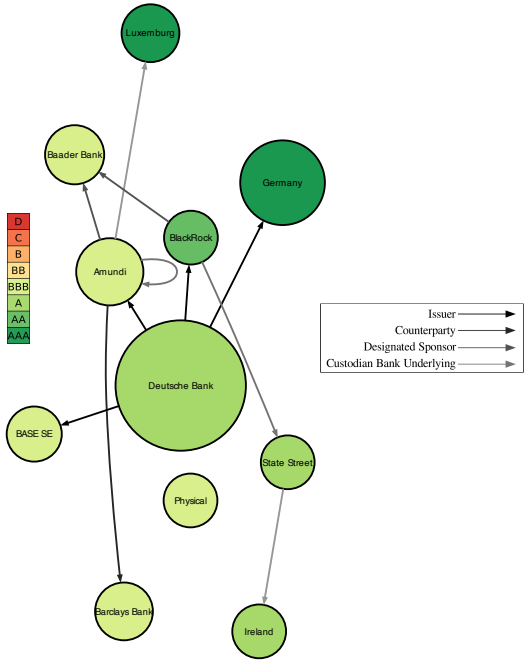


Designated Sponsor (HHI = 10000)



Concentration Risk Network

Concentration risk network for all entities related to the portfolio (e.g. issuer, custodian bank, counterparty, custodian bank of the underlying, country of origin) including their credit rating (see embedded legend):



Issuer Exposure

Issuer	Exposure	Pct.
Germany	601851 EUR	59.8%
Amundi	200010 EUR	19.9%
BASE SE	100198 EUR	10.0%
BlackRock	50011 EUR	5.0%
Total	952071 EUR	95.0%

Net Derivative / Swap Counterparty Exposure

Counterparty	Net Exposure	Pct.
Barclays Bank	10000 EUR	1.0%
Total	10000 EUR	1.0%

Custodian Exposure

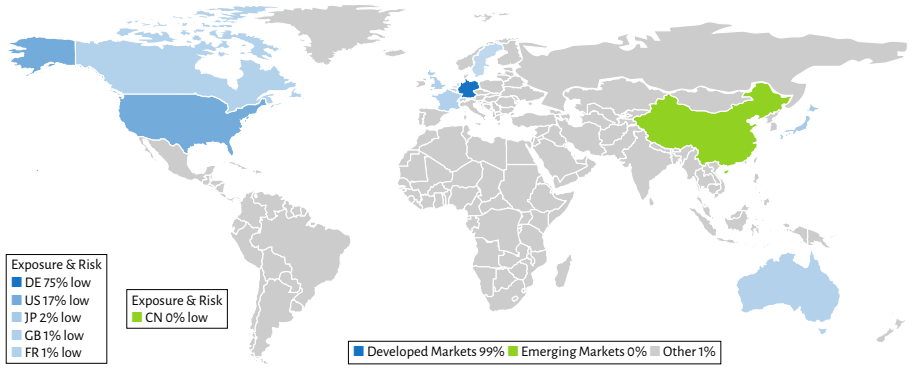
Custodian	Exposure	Pct.
Deutsche Bank	954071 EUR	94.9%
Physical	51802 EUR	5.1%
Total	1005872 EUR	100.0%

Custodian Bank Underlying Exposure

Custodian Bank Underlying	Exposure	Pct.
Amundi	200010 EUR	19.9%
State Street	50011 EUR	5.0%
Total	250021 EUR	24.9%

World Exposure and Country Risk Map

World exposure and risk map for all financial assets (e.g. equity, saving deposits and other fixed income instruments) including a country risk assessment according to ND-GAIN country readiness risk methodology:



SRRI Methodology

SRRI stands for **S**ynthetic **R**isk and **R**eward **I**ndicator and classifies the volatility of financial instruments or portfolios. The SRRI was developed by the European Securities and Markets Authority (ESMA) and is mandatory for all financial instruments to be included in the Key Information Document (KID). The isolated view of SRRI classes of single instruments is limited, diversification or investment type (speculative vs. hedging) can only be taken into account in a portfolio context:

Risk Class	Volatility (p.a.)	Description
1	0%-0.5%	very conservative, inflation risk likely
2	0.5%-2%	conservative portfolio, mainly bonds
3	2%-5%	moderatly conservative, more bonds than equity
4	5%-10%	balanced growth portfolio, well diversified
5	10%-15%	moderatly aggressive, mostly equities
6	15%-25%	aggressive portfolio consisting of single stocks
7	>25%	speculative leveraged portfolio, little diversification

Disclaimer

OCTARISK

Calculation Methodology

Value-at-Risk (VaR) is defined as a monetary loss which the portfolio won't exceed for a specific probability on a certain time horizon. The *expected shortfall* (ES) metric gives the average loss which occurs in all remaining cases where losses exceeds the VaR.
The calculation methodology is specified as a Monte-Carlo (MC) full valuation approach based on 50000 scenarios on a 10 day time horizon and a 99.9%) confidence intervall. The 10 day time horizon should reflect an expected one-time event in an investors entire life. Risk factors are modeled by multivariate cumulative distribution function, where both the marginal probability distribution and the codependence structure (given by t-copula) are calibrated on historical time series.
The diversification benefit is defined as relative reduction in VaR of the aggregated portfolio compared to sum of standalone VaRs of all positions.
Stresstesting is a complementary risk calculation methodology which shows sensitivities of the portfolio value with respect to pre-defined historic or parametric scenarios. Unlike the MC VaR, where correlated random shocks are applied to the risk factors, during stresstesting manually pre-defined shocks are applied. Explicit shock values are given for historical scenarios:

Stresstest	Applied shocks
Financial Crisis 2008	Equity (-50%), Gold (+35%), REITs (-40%), Interest Rates@1Y (-200bp),
Covid-19	Equity (-30%), Gold (-10%), REITs (-40%), Interest Rates@1Y (-50bp), Cryptoassets (-40%), Inflation Expectation@5Y (-20bp), Volatility Equity (+90%), FX EUR/USD (+5%)
CRISIS	Equity (-40%), Gold (+20%), Allianz (-60%), REITs (-40%), Interest Rates@5Y (+250bp), Cryptoassets (-70%), Inflation Expectation@5Y (+500bp), Corporate Spread (+200bp), FX EUR/USD (-10%)
Stagflation	Equity (-25%), Gold (+10%), REITs (-5%), Interest Rates@10Y (+250bp), Cryptoassets (-25%), Inflation Expectation@5Y (+300bp), Corp Spreads (+60bp)
Asian Flu 1997	Equity DM (15%), Equity EM (-30%) Interest Rates (IR)@1Y EUR (+100bp), IR@1Y USD (-100bp), FX EUR USD (-7%), FX EUR THB/KRW (-50%)
DotCom 2000	Equity (-30%), Interest Rates@1Y (+100bp), Volatility Equity (+150%)
Black Monday 1987	Equity EM (-50%), Pacific (-40%), Europe (-30%) NA (-25%), FX EUR/USD (-7%), Gold (-8%)
Twist Positive	IR@1Y (+100bp), IR@20Y (-200bp)
Twist Negative	IR@1Y (-100bp), IR@20Y (+200bp)
Butterfly Positive	IR@1Y (+200bp), IR@10Y (-100bp), IR@20Y (+200bp)
Butterfly Negative	IR@1Y (-200bp), IR@10Y (+100bp), IR@20Y (-200bp)

Assessing country risk

The ND-GAIN country sub-index *readiness score* measures a country's ability to make effective use of investments to adaptions actions because of safe and efficient business environment. The three components economic (doing business and investment climate based on Worldbank data), governance (stability of society, regulatory quality, rule of law) and social (social inequality, infrastructure) are combined into one score. See https://gain.nd.edu for further information.

Action recommendation (experimental)

The following actions are recommended by a LLM and have been generated by AI. This is an experimental feature only, apply common sense in following actions:
No LLM recommendations available. LM Studio server is not running. Please start the Local Server in LM Studio.