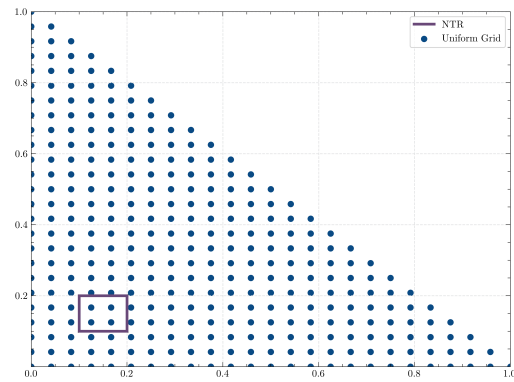


Appendices

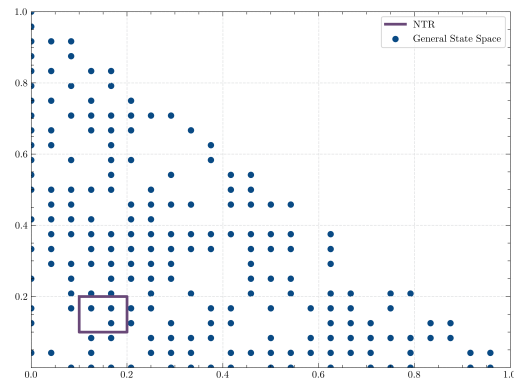
A Other sampling strategies

Figure A.1: Uniform grid sampling strategy



Note: Sample consists of $N = 200$ points.

Figure A.2: Naive random sampling strategy



Note: Sample consists of $N = 200$ points.

B Extended asset space parameters

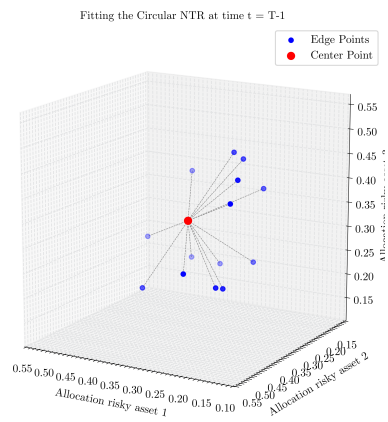
$$\mu = \begin{bmatrix} 0.0572 \\ 0.0638 \\ 0.07 \\ 0.0764 \\ 0.0828 \\ 0.06 \\ 0.07 \end{bmatrix}$$

$$\Sigma = \begin{bmatrix} 0.0256 & 0.00576 & 0.00288 & 0.00176 & 0.00096 & 0.002 & -0.001 \\ 0.00576 & 0.0324 & 0.00904 & 0.01069 & 0.01296 & 0 & -0.002 \\ 0.00288 & 0.00904 & 0.04 & 0.0132 & 0.0168 & 0 & -0.0015 \\ 0.00176 & 0.01069 & 0.0132 & 0.0484 & 0.02112 & 0 & -0.001 \\ 0.00096 & 0.01296 & 0.0168 & 0.02112 & 0.0576 & 0 & -0.0005 \\ 0.002 & 0 & 0 & 0 & 0 & 0.02 & 0 \\ -0.001 & -0.002 & -0.0015 & -0.001 & -0.0005 & 0 & 0.025 \end{bmatrix}$$

$$\text{Corr} = \begin{bmatrix} 1 & 0.2 & 0.09 & 0.05 & 0.025 & 0.0884 & -0.0395 \\ 0.2 & 1 & 0.2512 & 0.27 & 0.3 & 0 & -0.0703 \\ 0.09 & 0.2512 & 1 & 0.3 & 0.35 & 0 & -0.0474 \\ 0.05 & 0.27 & 0.3 & 1 & 0.4 & 0 & -0.0287 \\ 0.025 & 0.3 & 0.35 & 0.4 & 1 & 0 & -0.0132 \\ 0.0884 & 0 & 0 & 0 & 0 & 1 & 0 \\ -0.0395 & -0.0703 & -0.0474 & -0.0287 & -0.0132 & 0 & 1 \end{bmatrix}$$

C Fitting the 3D fixed cost NTRs

Figure C.1: Fitting scheme for the 3D sphere NTR



Fitting the sphere NTR with 3D data uses 14 points, more than necessary, to ensure a good fit