US Treasury 1 Month Yield - Spot

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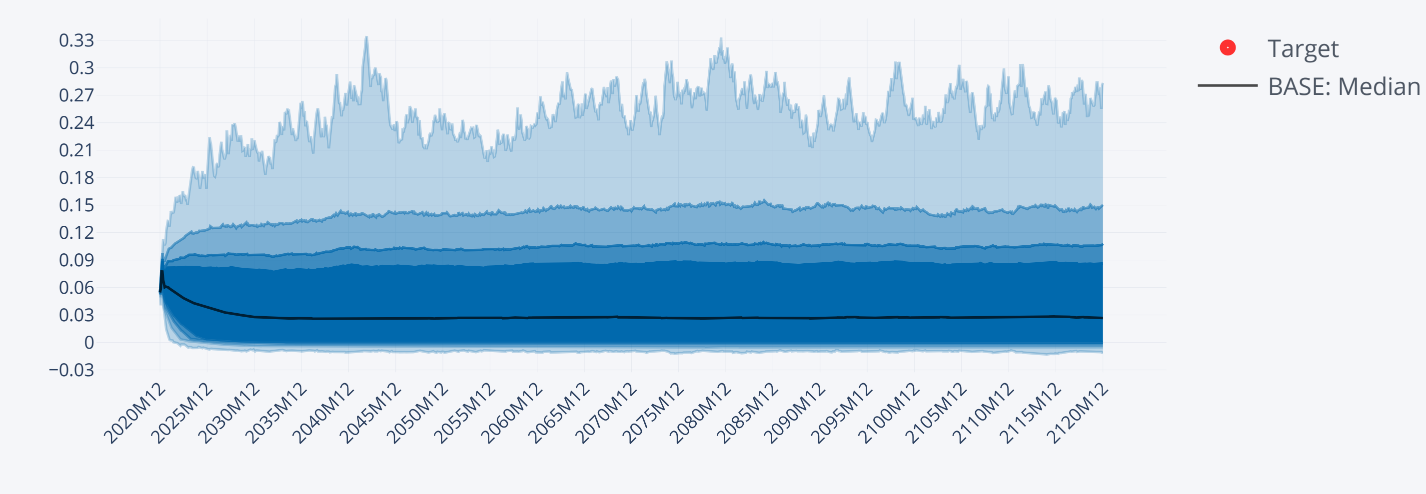
Simulated Data in Percentiles : US Treasury 1 Month Yield - Spot

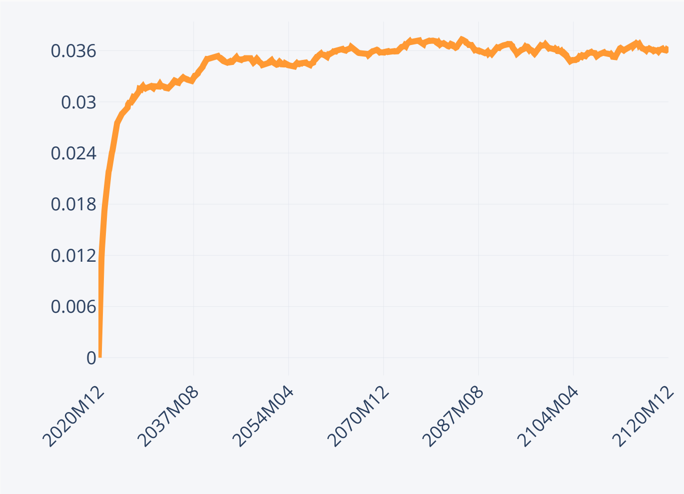


Simulated Data: There are 1200 Time Periods. Percentiles, Mean and Median are calculated across 10000 PATHS.
Percentiles Plotted : Min, 1%, 5%, 10%, 50%, 90%, 95%, 99%, Max
The distributions shown are across the paths for a given time period.

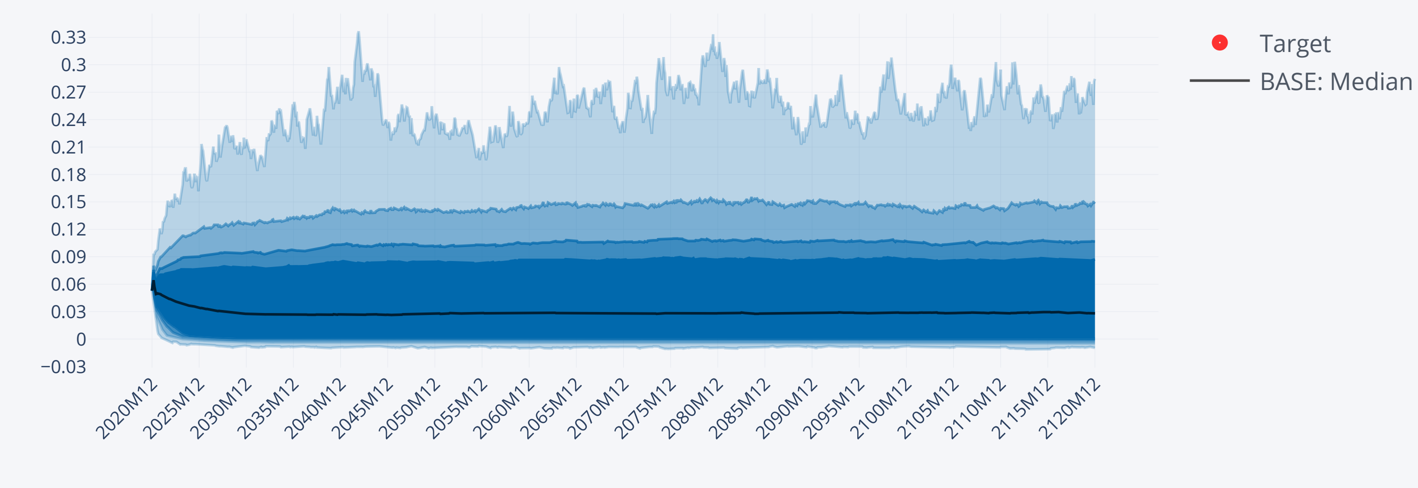
Simulation Summary

	BASE: 2021M12	BASE: 2050M12
mean	0.0595	0.0345
std	0.0171	0.0347
min	0.0031	-0.0098
1%	0.0221	-0.0050
5%	0.0322	-0.0021
10%	0.0378	-0.0002
50%	0.0589	0.0260
90%	0.0815	0.0837
95%	0.0885	0.1011
99%	0.1027	0.1411
max	0.1266	0.2452

Cross Sectional Volatility Over Time : BASE



Simulated Data in Percentiles : US Treasury 3 Month Yield - Spot

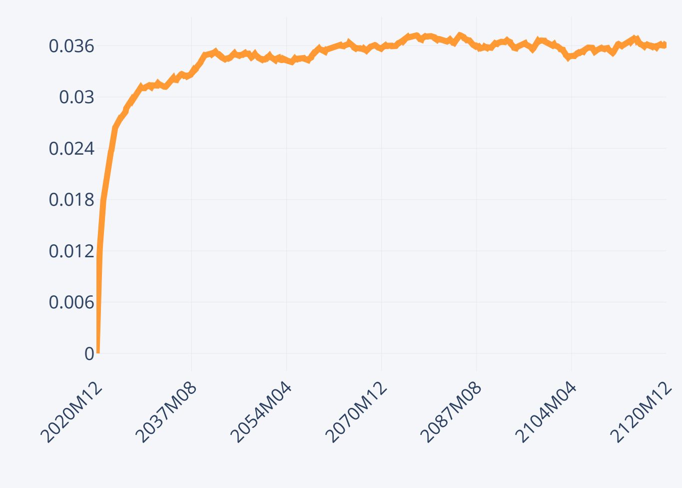


Simulated Data: There are 1200 Time Periods. Percentiles, Mean and Median are calculated across 10000 PATHS.
Percentiles Plotted : Min, 1%, 5%, 10%, 50%, 90%, 95%, 99%, Max
The distributions shown are across the paths for a given time period.

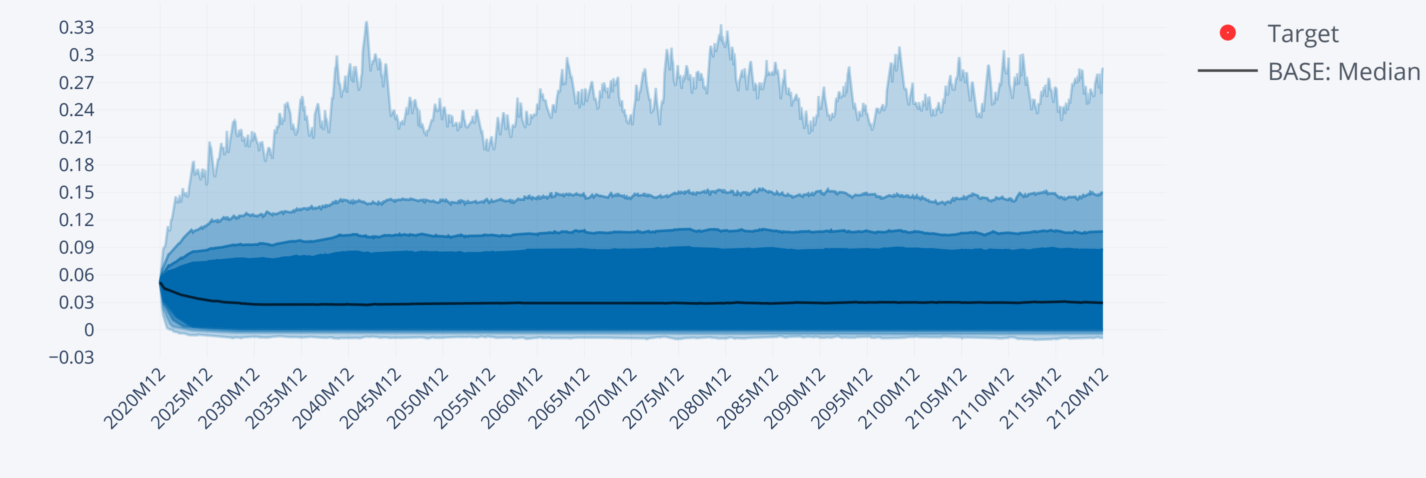
Simulation Summary

	BASE: 2021M12	BASE: 2050M12
mean	0.0487	0.0355
std	0.0165	0.0347
min	0.0014	-0.0089
1%	0.0129	-0.0045
5%	0.0223	-0.0017
10%	0.0280	0.0003
50%	0.0482	0.0275
90%	0.0702	0.0847
95%	0.0767	0.1016
99%	0.0900	0.1419
max	0.1149	0.2420

Cross Sectional Volatility Over Time : BASE



Simulated Data in Percentiles : US Treasury 6 Month Yield - Spot

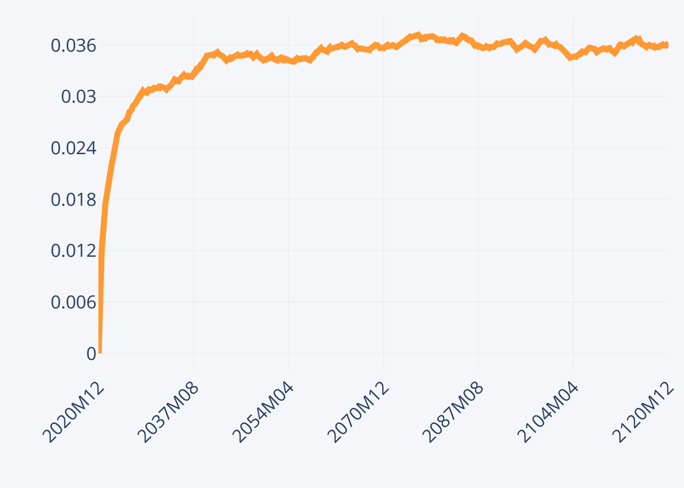


Simulated Data: There are 1200 Time Periods. Percentiles, Mean and Median are calculated across 10000 PATHS.
Percentiles Plotted : Min, 1%, 5%, 10%, 50%, 90%, 95%, 99%, Max
The distributions shown are across the paths for a given time period.

Simulation Summary

	BASE: 2021M12	BASE: 2050M12
mean	0.0428	0.0363
std	0.0161	0.0346
min	0.0006	-0.0084
1%	0.0077	-0.0040
5%	0.0169	-0.0013
10%	0.0226	0.0006
50%	0.0424	0.0288
90%	0.0638	0.0850
95%	0.0699	0.1018
99%	0.0829	0.1420
max	0.1078	0.2393

Cross Sectional Volatility Over Time : BASE



US Treasury 1 Year Yield - Spot

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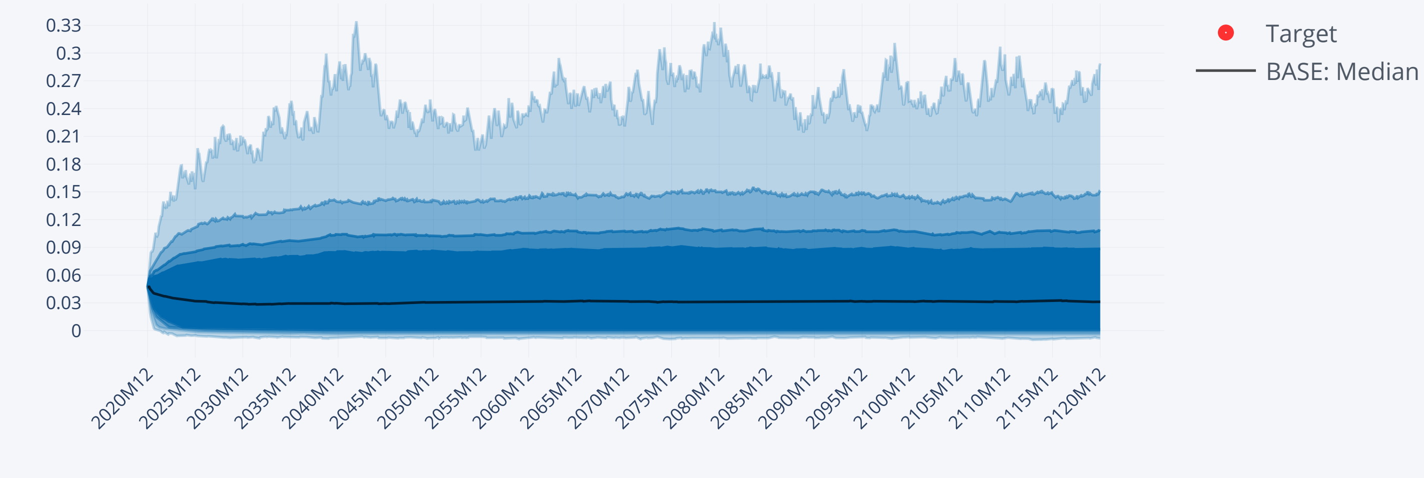
Simulated Data in Percentiles : US Treasury 1 Year Yield - Spot

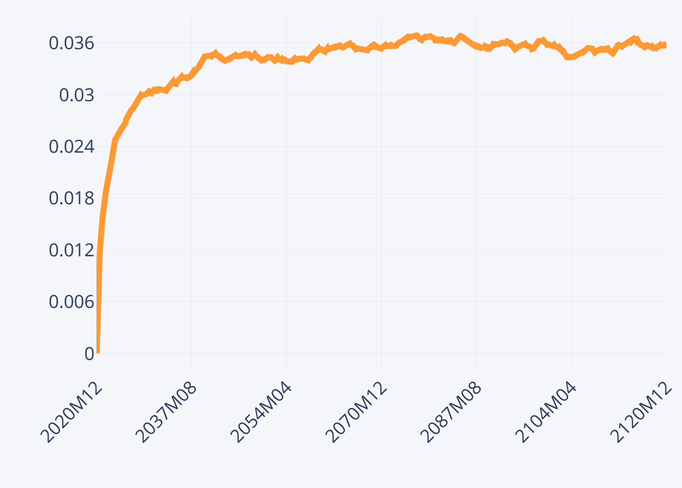


Simulated Data: There are 1200 Time Periods. Percentiles, Mean and Median are calculated across 10000 PATHS.
Percentiles Plotted : Min, 1%, 5%, 10%, 50%, 90%, 95%, 99%, Max
The distributions shown are across the paths for a given time period.

Simulation Summary

	BASE: 2021M12	BASE: 2050M12
mean	0.0392	0.0375
std	0.0155	0.0343
min	0.0002	-0.0079
1%	0.0056	-0.0034
5%	0.0143	-0.0007
10%	0.0198	0.0011
50%	0.0389	0.0305
90%	0.0594	0.0857
95%	0.0653	0.1020
99%	0.0775	0.1410
max	0.1020	0.2357

Cross Sectional Volatility Over Time : BASE



US Treasury 2 Year Yield - Spot

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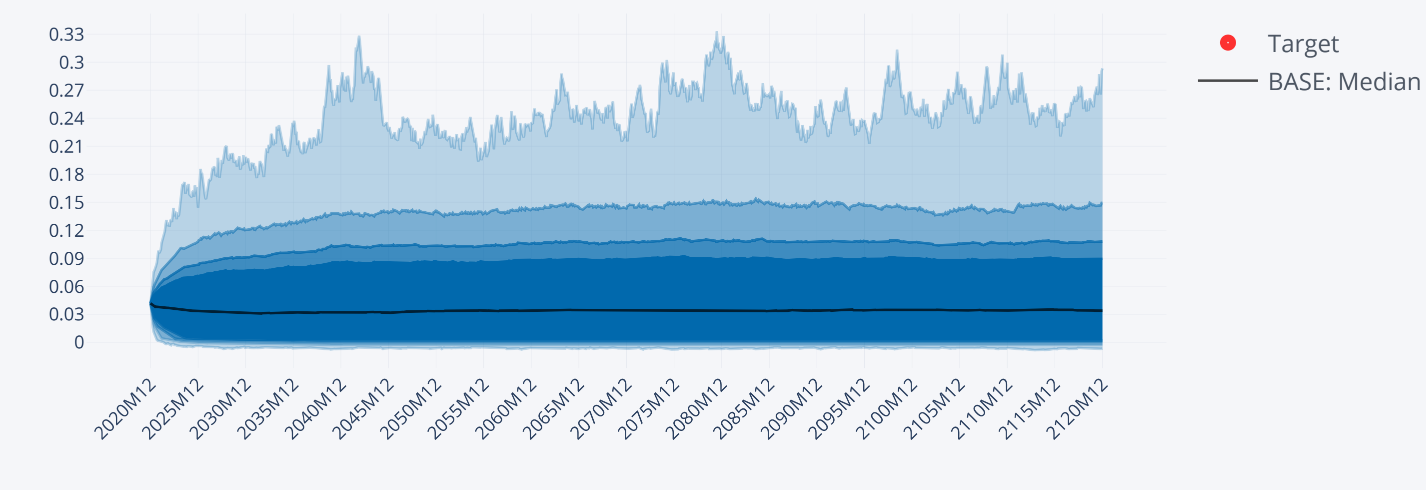
Simulated Data in Percentiles : US Treasury 2 Year Yield - Spot

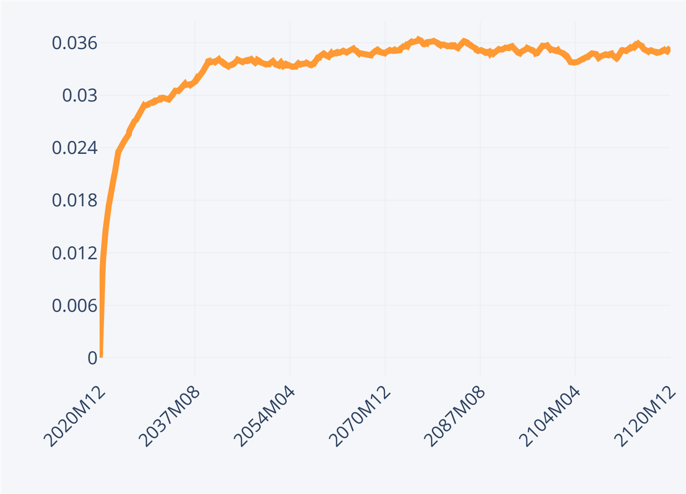


Simulated Data: There are 1200 Time Periods. Percentiles, Mean and Median are calculated across 10000 PATHS.
Percentiles Plotted : Min, 1%, 5%, 10%, 50%, 90%, 95%, 99%, Max
The distributions shown are across the paths for a given time period.

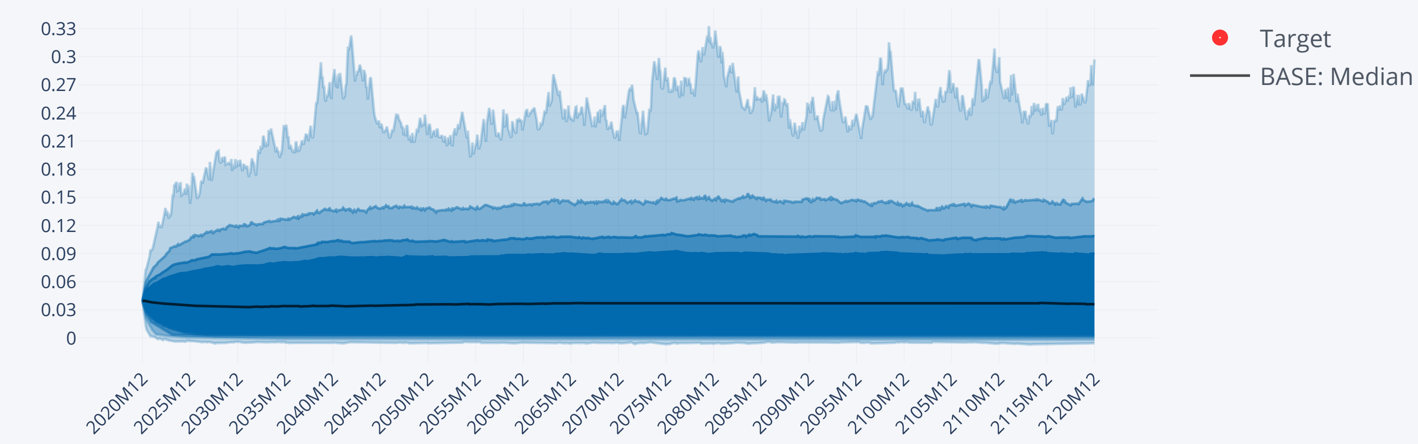
Simulation Summary

	BASE: 2021M12	BASE: 2050M12
mean	0.0382	0.0394
std	0.0145	0.0337
min	0.0006	-0.0067
1%	0.0068	-0.0024
5%	0.0148	0.0002
10%	0.0200	0.0020
50%	0.0379	0.0333
90%	0.0571	0.0865
95%	0.0627	0.1023
99%	0.0742	0.1417
max	0.0970	0.2299

Cross Sectional Volatility Over Time : BASE



Simulated Data in Percentiles : US Treasury 3 Year Yield - Spot

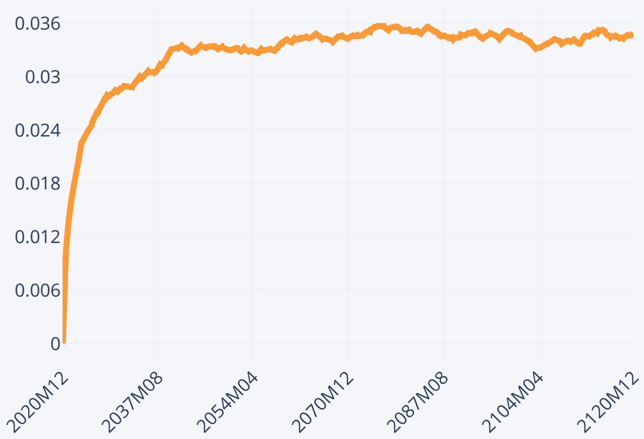


Simulated Data: There are 1200 Time Periods. Percentiles, Mean and Median are calculated across 10000 PATHS.
Percentiles Plotted : Min, 1%, 5%, 10%, 50%, 90%, 95%, 99%, Max
The distributions shown are across the paths for a given time period.

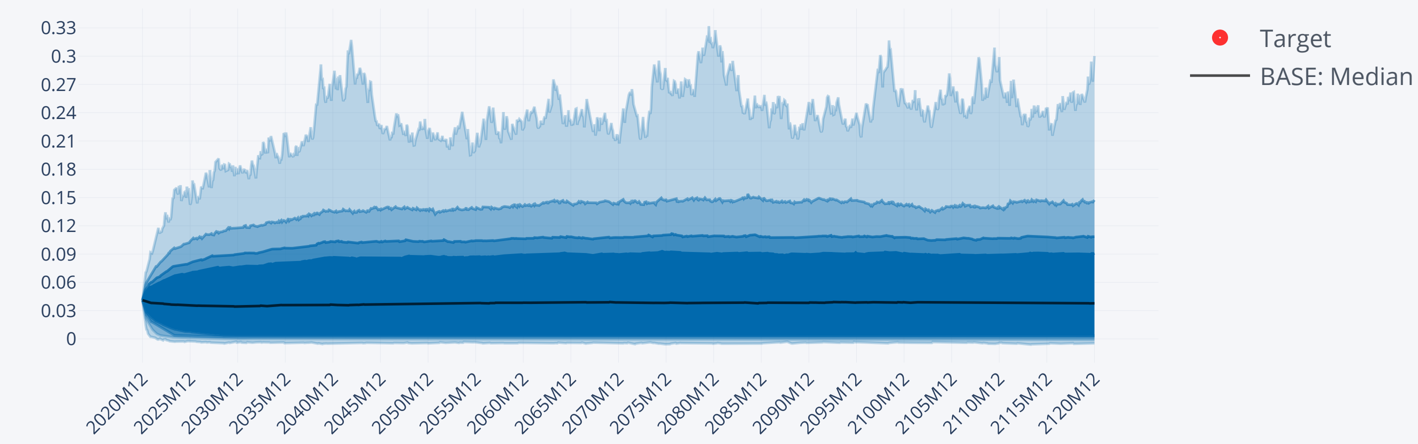
Simulation Summary

	BASE: 2021M12	BASE: 2050M12
mean	0.0384	0.0411
std	0.0137	0.0331
min	0.0011	-0.0056
1%	0.0087	-0.0015
5%	0.0165	0.0010
10%	0.0212	0.0027
50%	0.0381	0.0355
90%	0.0562	0.0872
95%	0.0614	0.1030
99%	0.0725	0.1386
max	0.0938	0.2248

Cross Sectional Volatility Over Time : BASE



Simulated Data in Percentiles : US Treasury 4 Year Yield - Spot

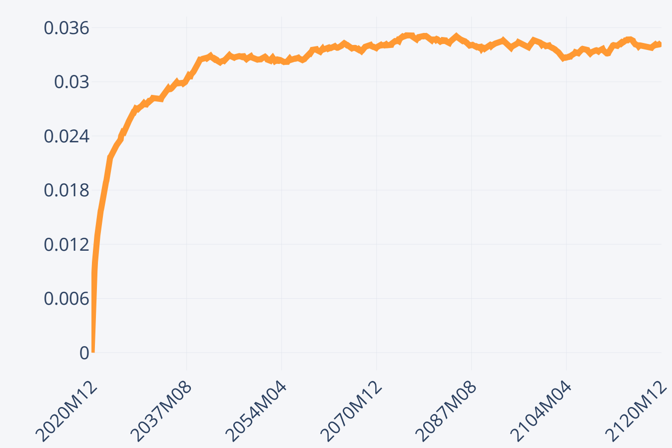


Simulated Data: There are 1200 Time Periods. Percentiles, Mean and Median are calculated across 10000 PATHS.
Percentiles Plotted : Min, 1%, 5%, 10%, 50%, 90%, 95%, 99%, Max
The distributions shown are across the paths for a given time period.

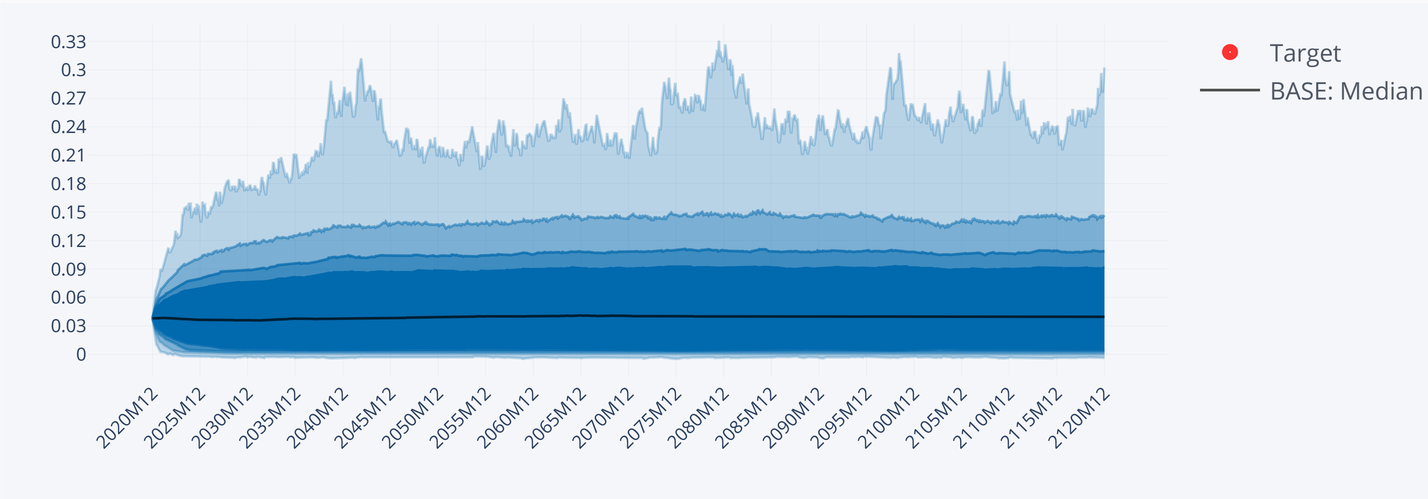
Simulation Summary

	BASE: 2021M12	BASE: 2050M12
mean	0.0385	0.0426
std	0.0130	0.0326
min	0.0015	-0.0047
1%	0.0106	-0.0007
5%	0.0179	0.0017
10%	0.0223	0.0034
50%	0.0381	0.0375
90%	0.0555	0.0878
95%	0.0602	0.1030
99%	0.0708	0.1371
max	0.0908	0.2202

Cross Sectional Volatility Over Time : BASE



Simulated Data in Percentiles : US Treasury 5 Year Yield - Spot

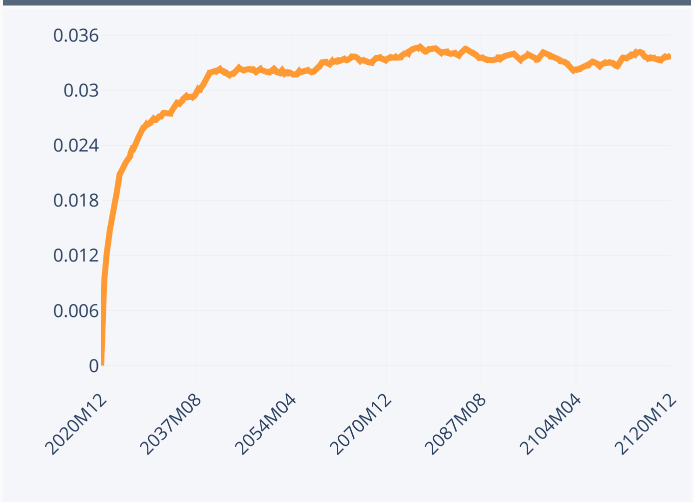


Simulated Data: There are 1200 Time Periods. Percentiles, Mean and Median are calculated across 10000 PATHS.
Percentiles Plotted : Min, 1%, 5%, 10%, 50%, 90%, 95%, 99%, Max
The distributions shown are across the paths for a given time period.

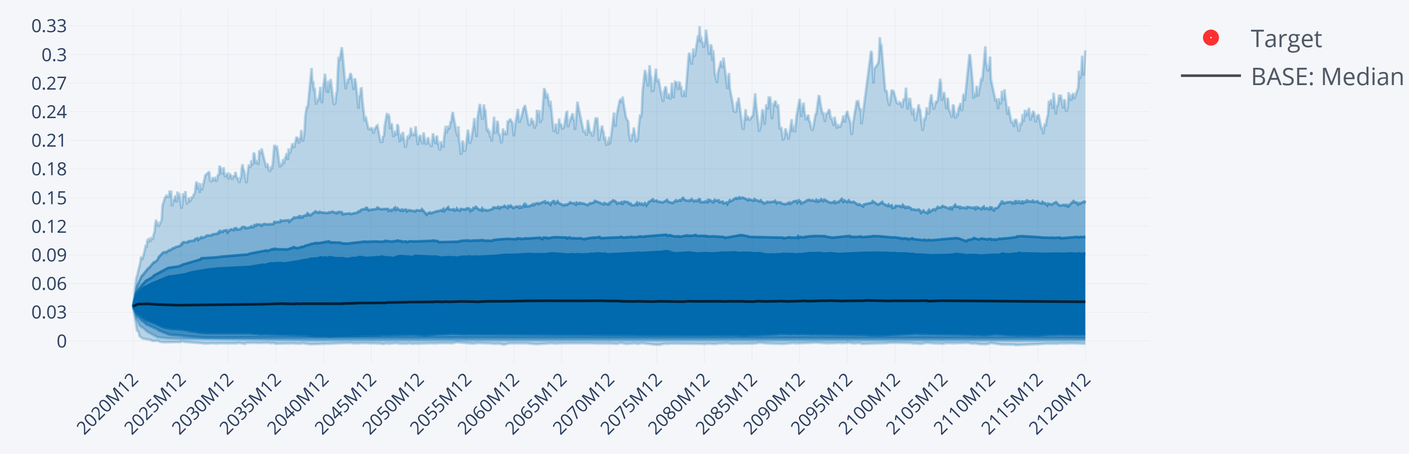
Simulation Summary

	BASE: 2021M12	BASE: 2050M12
mean	0.0388	0.0440
std	0.0124	0.0322
min	0.0019	-0.0038
1%	0.0123	0.0001
5%	0.0193	0.0023
10%	0.0235	0.0039
50%	0.0384	0.0392
90%	0.0550	0.0885
95%	0.0595	0.1032
99%	0.0694	0.1368
max	0.0883	0.2160

Cross Sectional Volatility Over Time : BASE



Simulated Data in Percentiles : US Treasury 6 Year Yield - Spot

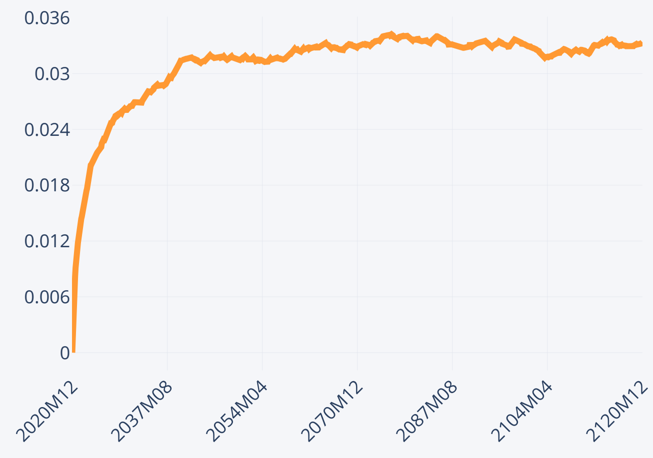


Simulated Data: There are 1200 Time Periods. Percentiles, Mean and Median are calculated across 10000 PATHS.
Percentiles Plotted : Min, 1%, 5%, 10%, 50%, 90%, 95%, 99%, Max
The distributions shown are across the paths for a given time period.

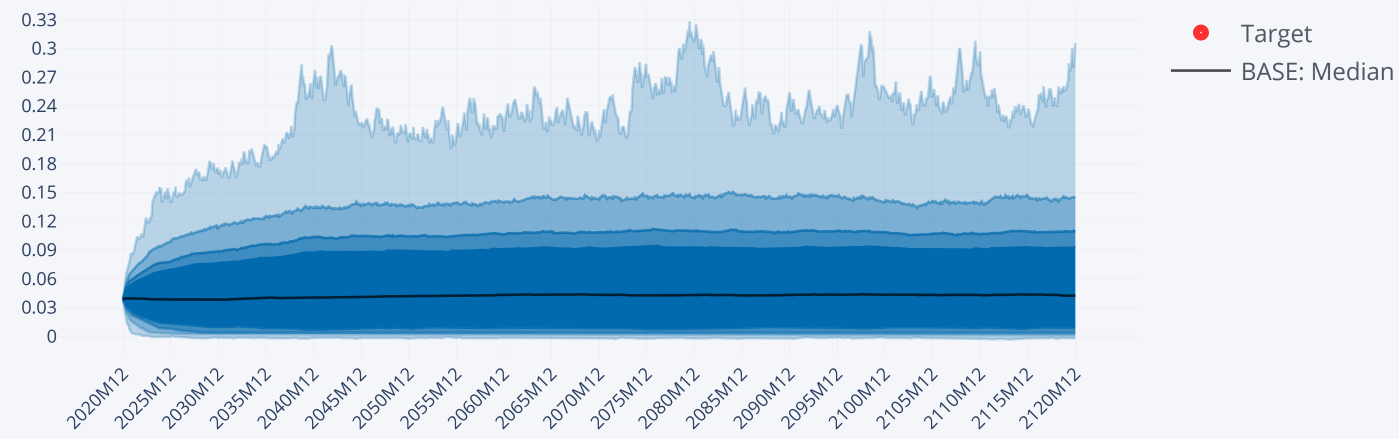
Simulation Summary

	BASE: 2021M12	BASE: 2050M12
mean	0.0393	0.0453
std	0.0118	0.0317
min	0.0024	-0.0031
1%	0.0140	0.0007
5%	0.0206	0.0028
10%	0.0246	0.0060
50%	0.0389	0.0407
90%	0.0548	0.0890
95%	0.0592	0.1033
99%	0.0686	0.1363
max	0.0864	0.2122

Cross Sectional Volatility Over Time : BASE



Simulated Data in Percentiles : US Treasury 7 Year Yield - Spot

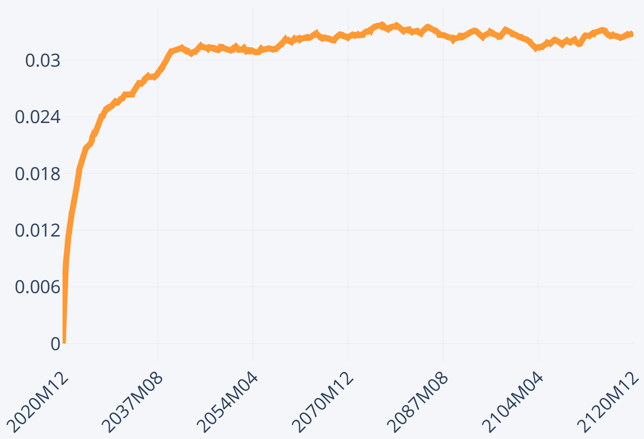


Simulated Data: There are 1200 Time Periods. Percentiles, Mean and Median are calculated across 10000 PATHS.
Percentiles Plotted : Min, 1%, 5%, 10%, 50%, 90%, 95%, 99%, Max
The distributions shown are across the paths for a given time period.

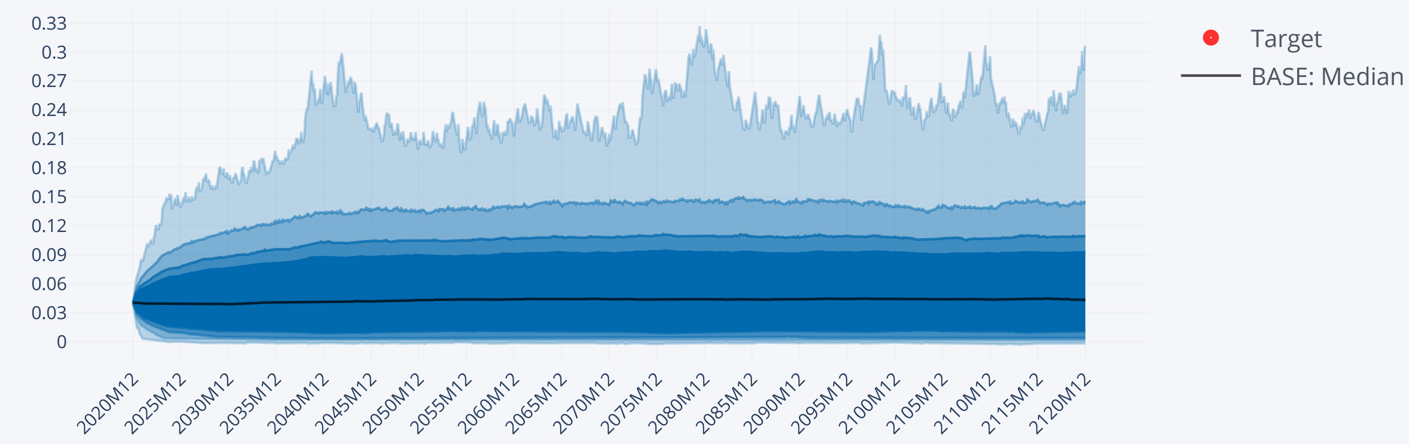
Simulation Summary

	BASE: 2021M12	BASE: 2050M12
mean	0.0398	0.0464
std	0.0114	0.0313
min	0.0028	-0.0024
1%	0.0154	0.0013
5%	0.0218	0.0033
10%	0.0256	0.0083
50%	0.0394	0.0420
90%	0.0547	0.0894
95%	0.0589	0.1037
99%	0.0681	0.1365
max	0.0847	0.2087

Cross Sectional Volatility Over Time : BASE



Simulated Data in Percentiles : US Treasury 8 Year Yield - Spot

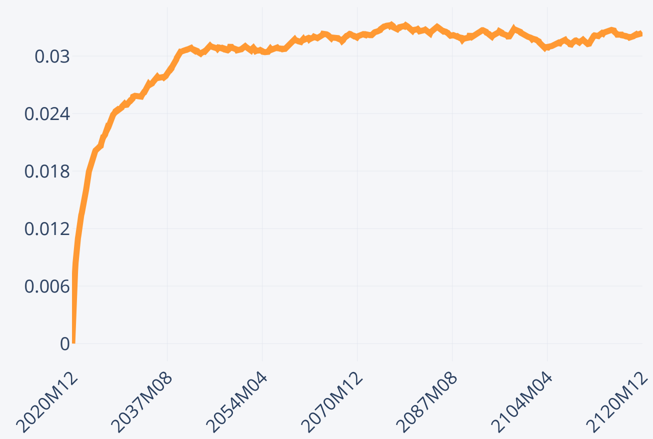


Simulated Data: There are 1200 Time Periods. Percentiles, Mean and Median are calculated across 10000 PATHS.
Percentiles Plotted : Min, 1%, 5%, 10%, 50%, 90%, 95%, 99%, Max
The distributions shown are across the paths for a given time period.

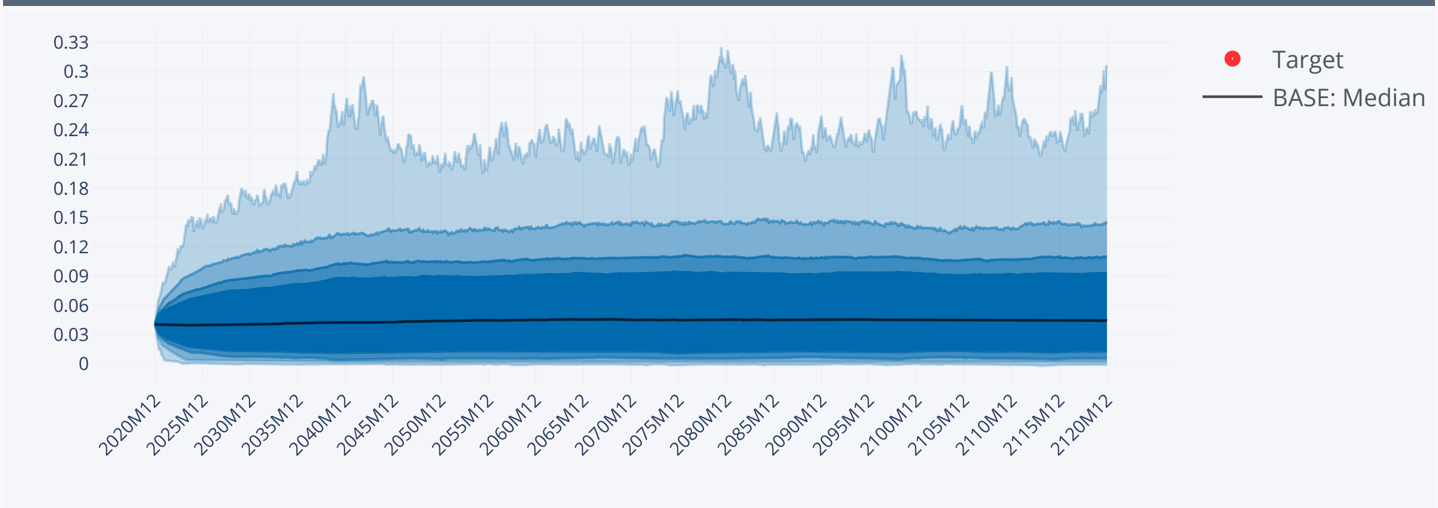
Simulation Summary

	BASE: 2021M12	BASE: 2050M12
mean	0.0401	0.0474
std	0.0110	0.0308
min	0.0031	-0.0018
1%	0.0165	0.0018
5%	0.0228	0.0038
10%	0.0264	0.0102
50%	0.0397	0.0431
90%	0.0545	0.0899
95%	0.0586	0.1038
99%	0.0676	0.1356
max	0.0830	0.2054

Cross Sectional Volatility Over Time : BASE



Simulated Data in Percentiles : US Treasury 9 Year Yield - Spot

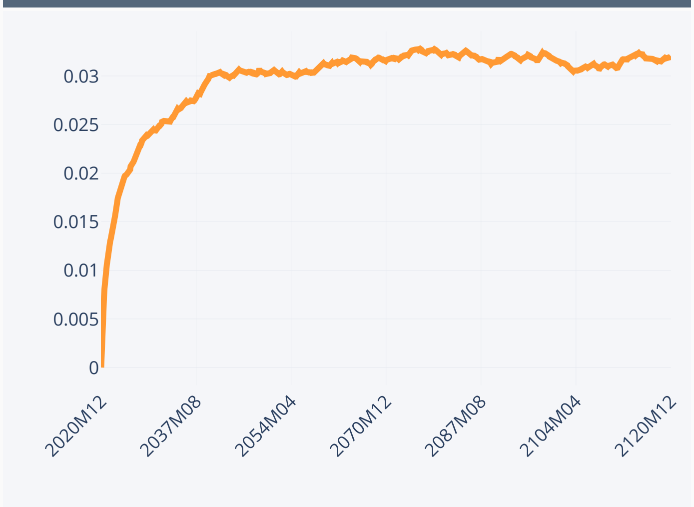


Simulated Data: There are 1200 Time Periods. Percentiles, Mean and Median are calculated across 10000 PATHS.
Percentiles Plotted : Min, 1%, 5%, 10%, 50%, 90%, 95%, 99%, Max
The distributions shown are across the paths for a given time period.

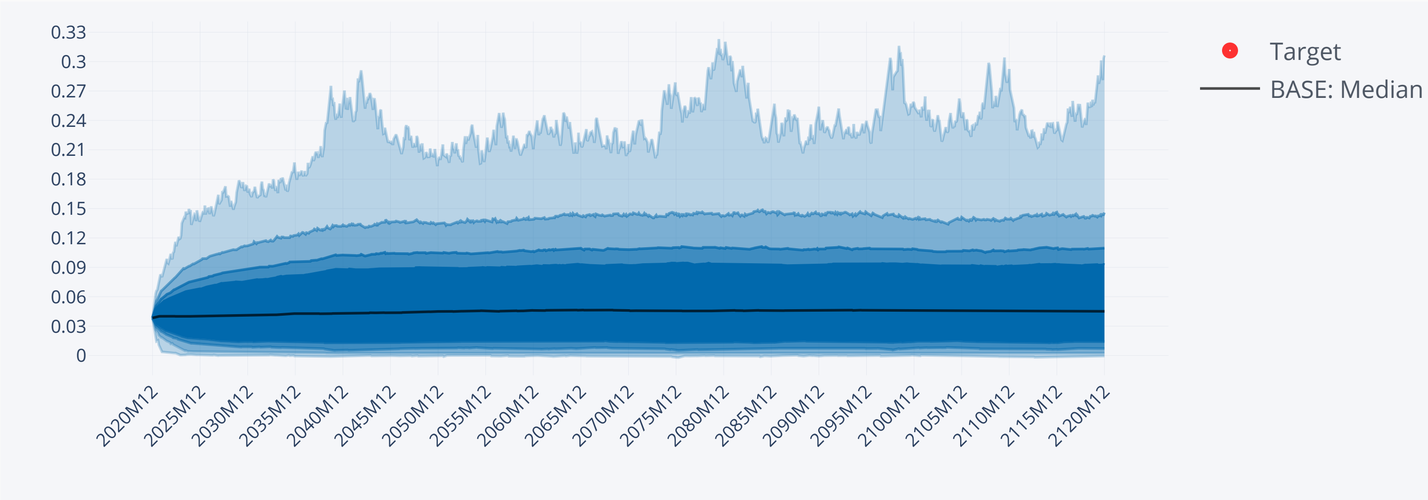
Simulation Summary

	BASE: 2021M12	BASE: 2050M12
mean	0.0403	0.0482
std	0.0106	0.0304
min	0.0034	-0.0012
1%	0.0174	0.0022
5%	0.0235	0.0047
10%	0.0270	0.0119
50%	0.0399	0.0442
90%	0.0542	0.0902
95%	0.0583	0.1042
99%	0.0669	0.1359
max	0.0814	0.2023

Cross Sectional Volatility Over Time : BASE



Simulated Data in Percentiles : US Treasury 10 Year Yield - Spot

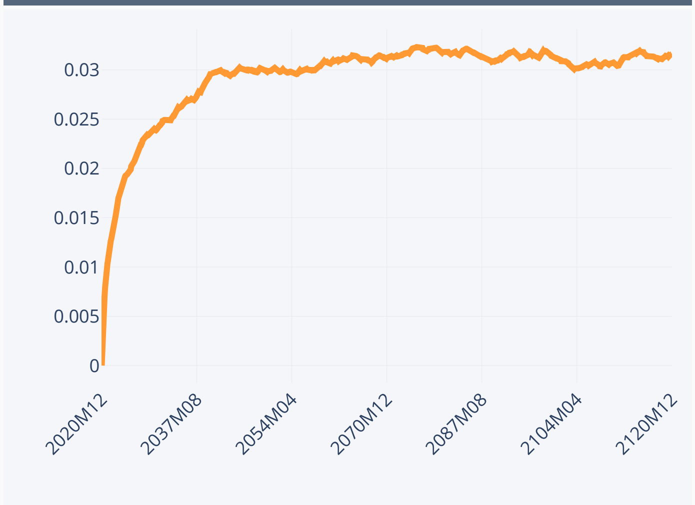


Simulated Data: There are 1200 Time Periods. Percentiles, Mean and Median are calculated across 10000 PATHS.
Percentiles Plotted : Min, 1%, 5%, 10%, 50%, 90%, 95%, 99%, Max
The distributions shown are across the paths for a given time period.

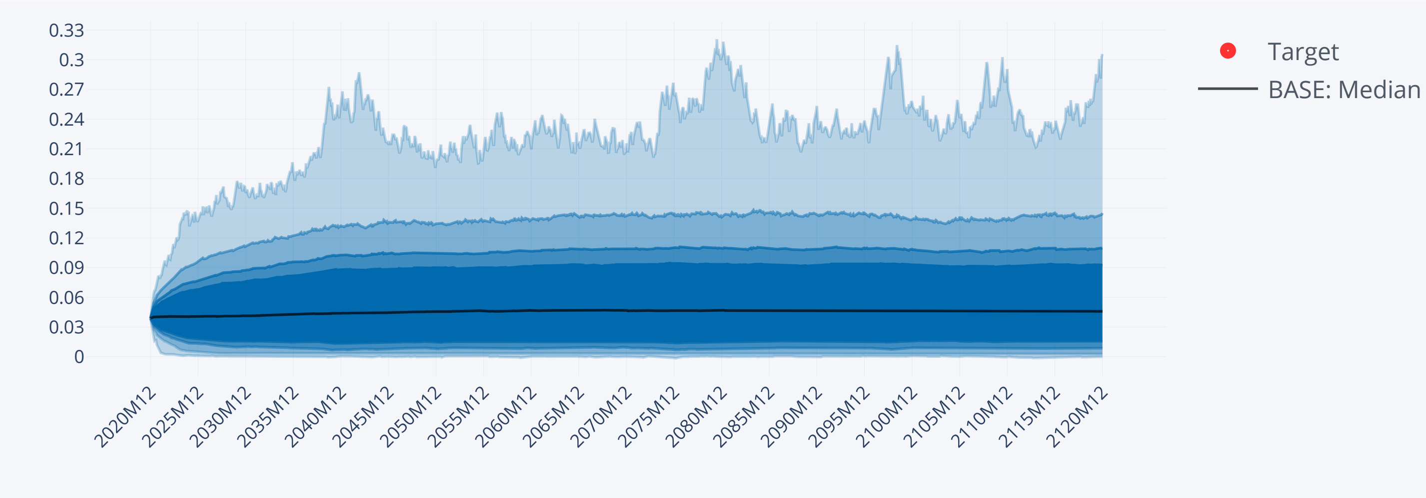
Simulation Summary

	BASE: 2021M12	BASE: 2050M12
mean	0.0406	0.0490
std	0.0103	0.0300
min	0.0037	-0.0007
1%	0.0183	0.0026
5%	0.0243	0.0064
10%	0.0277	0.0134
50%	0.0402	0.0450
90%	0.0542	0.0904
95%	0.0582	0.1043
99%	0.0665	0.1350
max	0.0801	0.1994

Cross Sectional Volatility Over Time : BASE



Simulated Data in Percentiles : US Treasury 11 Year Yield - Spot

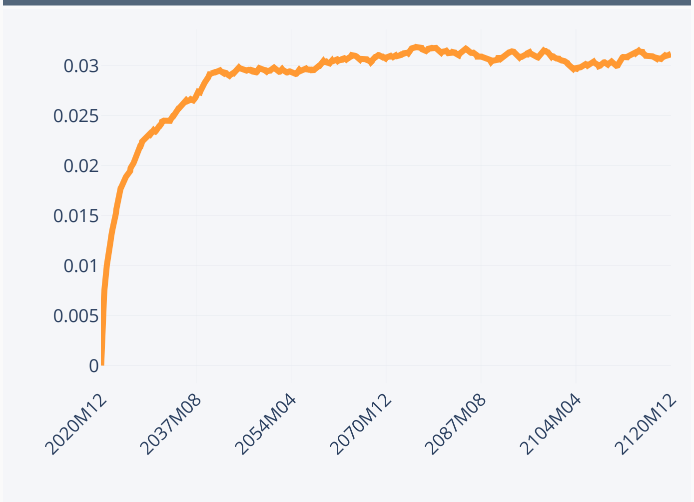


Simulated Data: There are 1200 Time Periods. Percentiles, Mean and Median are calculated across 10000 PATHS.
Percentiles Plotted : Min, 1%, 5%, 10%, 50%, 90%, 95%, 99%, Max
The distributions shown are across the paths for a given time period.

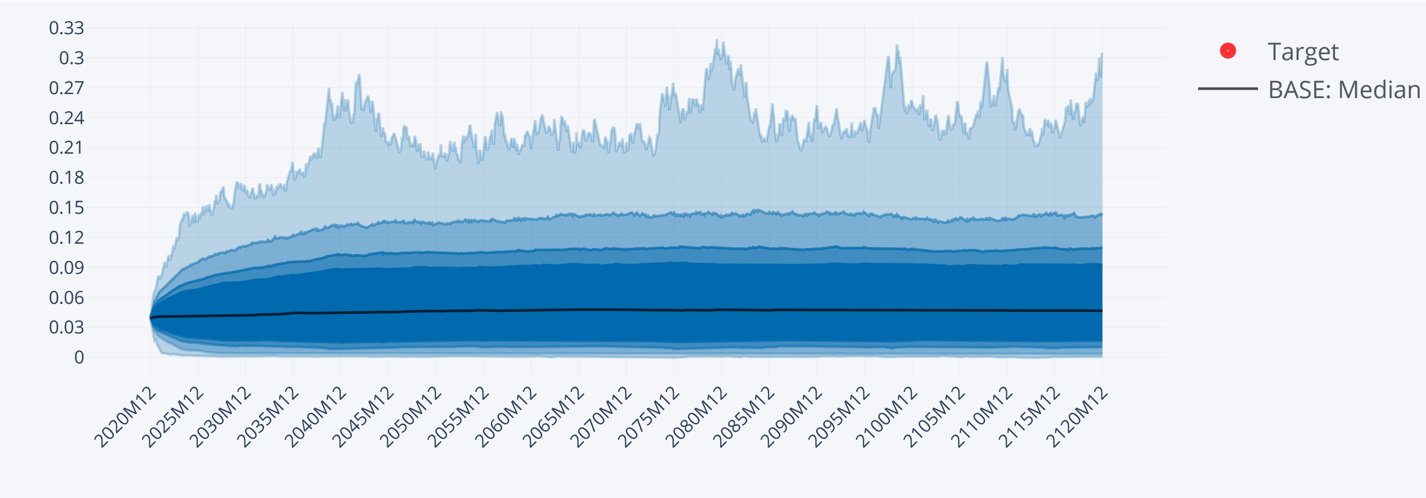
Simulation Summary

	BASE: 2021M12	BASE: 2050M12
mean	0.0409	0.0497
std	0.0101	0.0297
min	0.0039	-0.0002
1%	0.0192	0.0030
5%	0.0251	0.0078
10%	0.0283	0.0148
50%	0.0405	0.0457
90%	0.0541	0.0905
95%	0.0580	0.1043
99%	0.0660	0.1344
max	0.0789	0.1967

Cross Sectional Volatility Over Time : BASE



Simulated Data in Percentiles : US Treasury 12 Year Yield - Spot

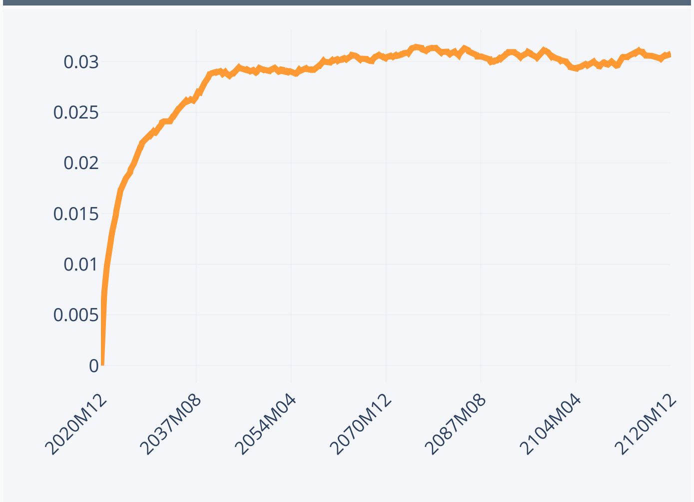


Simulated Data: There are 1200 Time Periods. Percentiles, Mean and Median are calculated across 10000 PATHS.
Percentiles Plotted : Min, 1%, 5%, 10%, 50%, 90%, 95%, 99%, Max
The distributions shown are across the paths for a given time period.

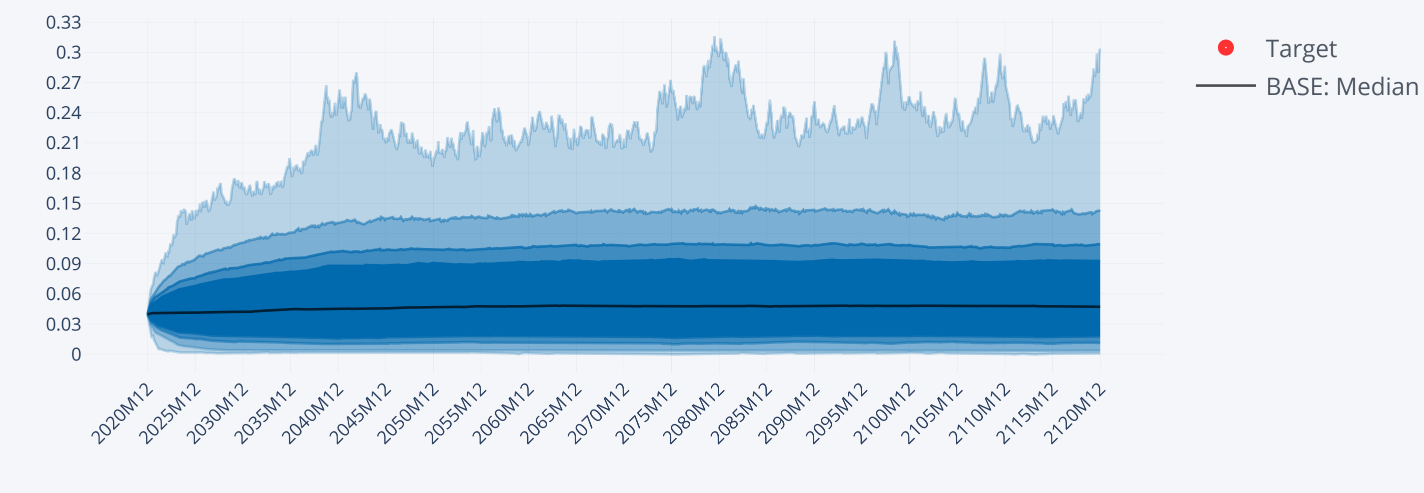
Simulation Summary

	BASE: 2021M12	BASE: 2050M12
mean	0.0411	0.0503
std	0.0098	0.0293
min	0.0048	0.0002
1%	0.0200	0.0033
5%	0.0257	0.0092
10%	0.0289	0.0160
50%	0.0407	0.0463
90%	0.0539	0.0906
95%	0.0578	0.1043
99%	0.0657	0.1343
max	0.0779	0.1940

Cross Sectional Volatility Over Time : BASE



Simulated Data in Percentiles : US Treasury 13 Year Yield - Spot

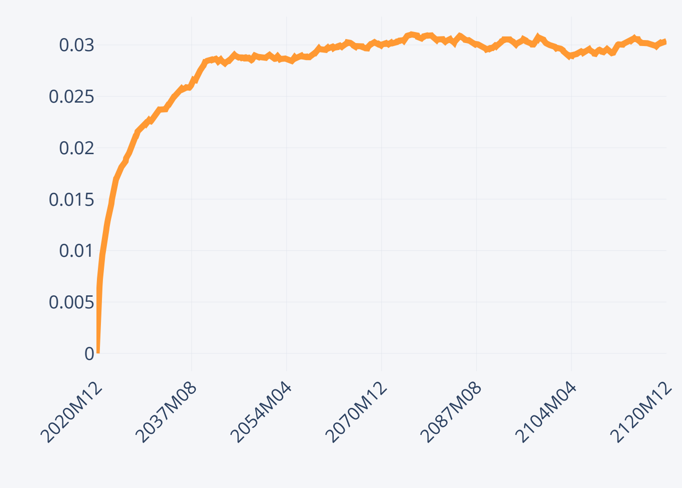


Simulated Data: There are 1200 Time Periods. Percentiles, Mean and Median are calculated across 10000 PATHS.
Percentiles Plotted : Min, 1%, 5%, 10%, 50%, 90%, 95%, 99%, Max
The distributions shown are across the paths for a given time period.

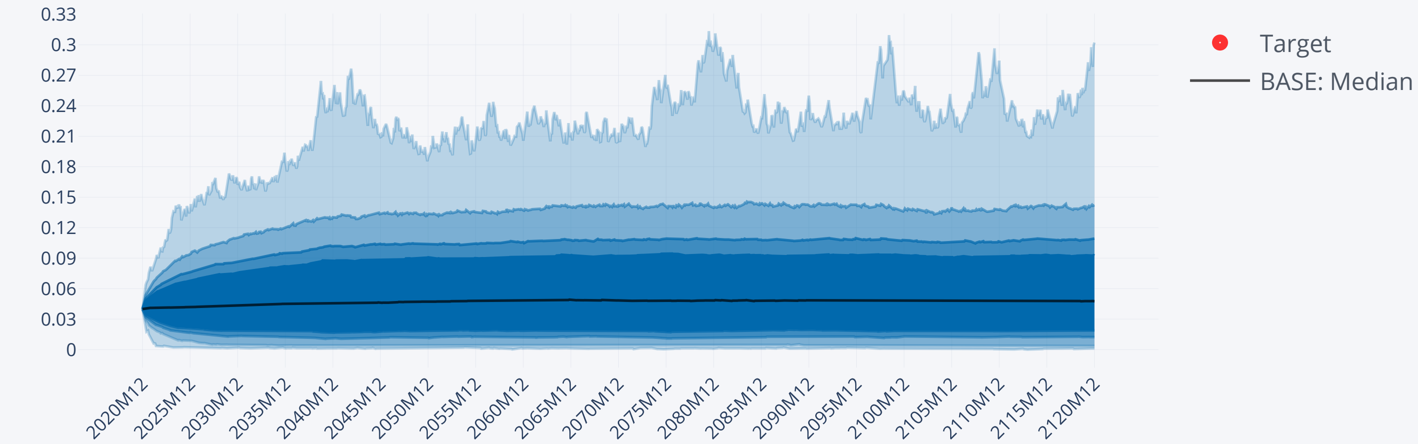
Simulation Summary

	BASE: 2021M12	BASE: 2050M12
mean	0.0413	0.0508
std	0.0096	0.0289
min	0.0059	0.0006
1%	0.0206	0.0036
5%	0.0263	0.0104
10%	0.0294	0.0171
50%	0.0409	0.0469
90%	0.0538	0.0906
95%	0.0576	0.1041
99%	0.0653	0.1340
max	0.0776	0.1914

Cross Sectional Volatility Over Time : BASE



Simulated Data in Percentiles : US Treasury 14 Year Yield - Spot

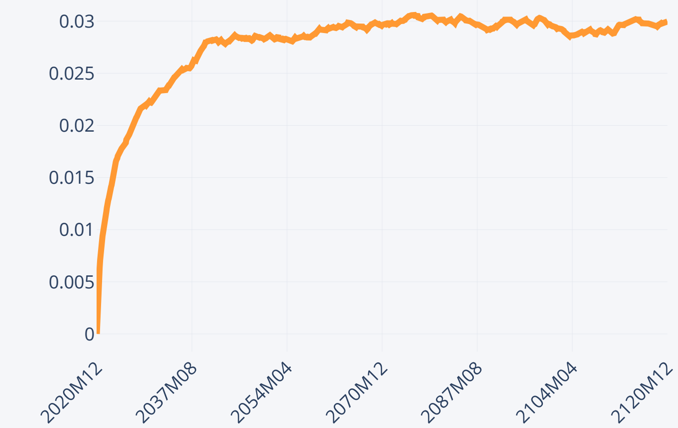


Simulated Data: There are 1200 Time Periods. Percentiles, Mean and Median are calculated across 10000 PATHS.
Percentiles Plotted : Min, 1%, 5%, 10%, 50%, 90%, 95%, 99%, Max
The distributions shown are across the paths for a given time period.

Simulation Summary

	BASE: 2021M12	BASE: 2050M12
mean	0.0415	0.0512
std	0.0094	0.0285
min	0.0070	0.0009
1%	0.0213	0.0039
5%	0.0268	0.0116
10%	0.0298	0.0180
50%	0.0411	0.0474
90%	0.0537	0.0908
95%	0.0575	0.1039
99%	0.0650	0.1334
max	0.0772	0.1889

Cross Sectional Volatility Over Time : BASE



US Treasury 15 Year Yield - Spot

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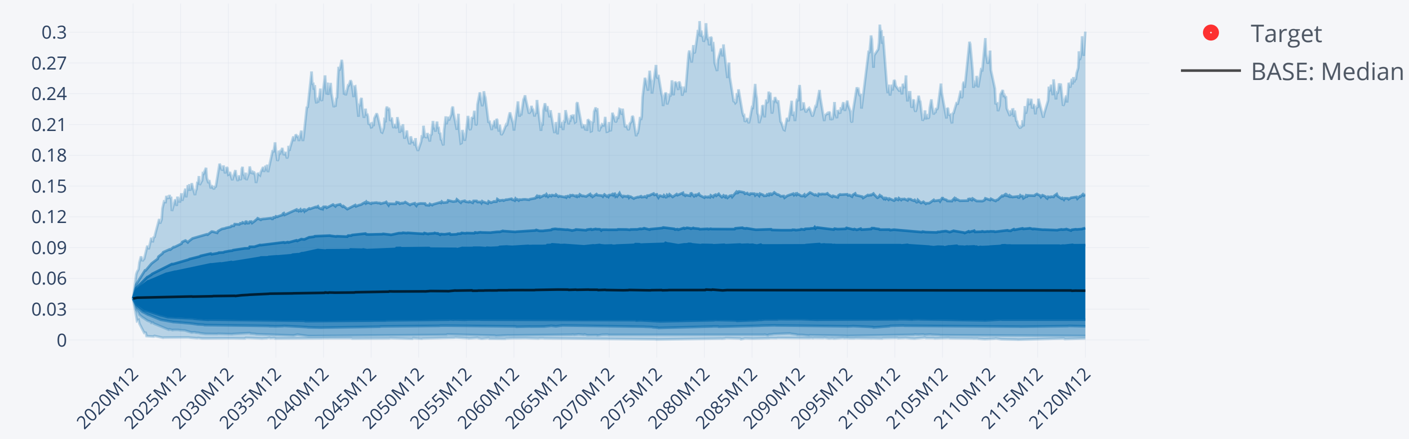
Simulated Data in Percentiles : US Treasury 15 Year Yield - Spot

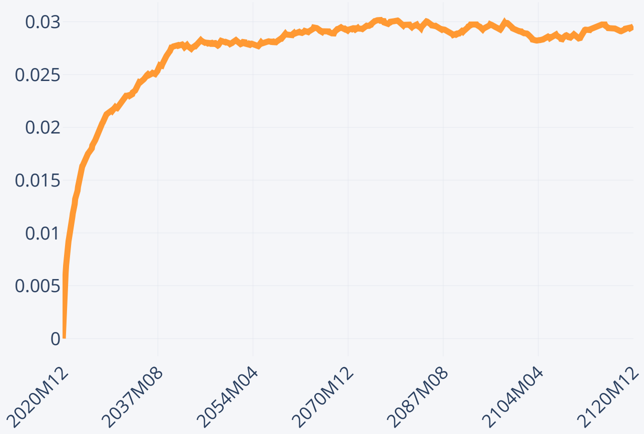


Simulated Data: There are 1200 Time Periods. Percentiles, Mean and Median are calculated across 10000 PATHS.
Percentiles Plotted : Min, 1%, 5%, 10%, 50%, 90%, 95%, 99%, Max
The distributions shown are across the paths for a given time period.

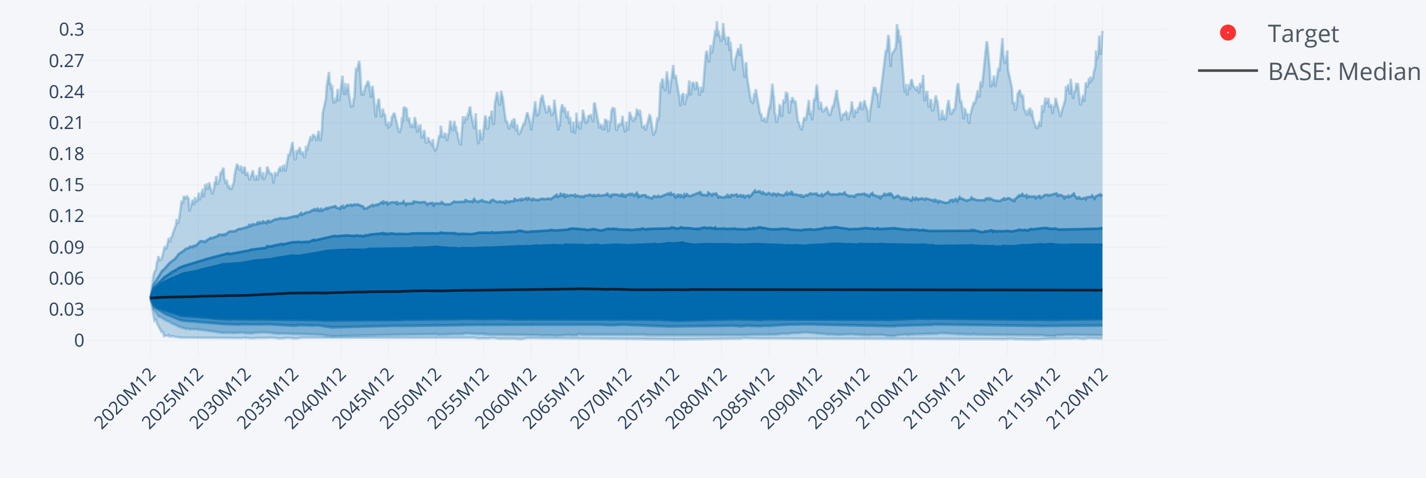
Simulation Summary

	BASE: 2021M12	BASE: 2050M12
mean	0.0417	0.0516
std	0.0092	0.0281
min	0.0079	0.0013
1%	0.0219	0.0044
5%	0.0273	0.0127
10%	0.0303	0.0189
50%	0.0413	0.0478
90%	0.0536	0.0905
95%	0.0573	0.1037
99%	0.0647	0.1324
max	0.0769	0.1865

Cross Sectional Volatility Over Time : BASE



Simulated Data in Percentiles : US Treasury 16 Year Yield - Spot

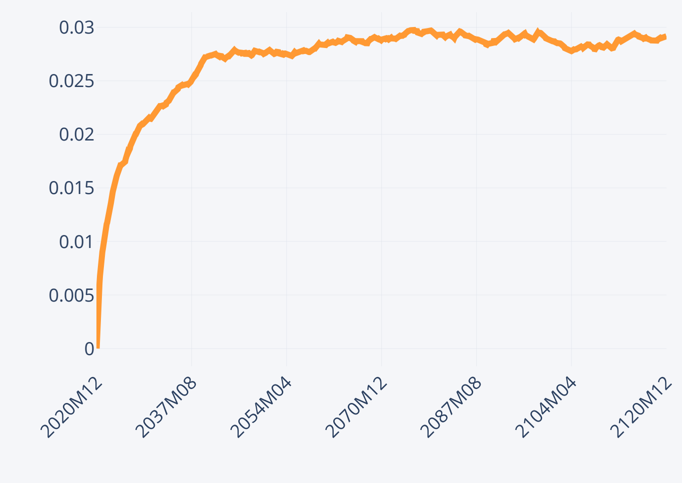


Simulated Data: There are 1200 Time Periods. Percentiles, Mean and Median are calculated across 10000 PATHS.
Percentiles Plotted : Min, 1%, 5%, 10%, 50%, 90%, 95%, 99%, Max
The distributions shown are across the paths for a given time period.

Simulation Summary

	BASE: 2021M12	BASE: 2050M12
mean	0.0418	0.0519
std	0.0090	0.0277
min	0.0088	0.0016
1%	0.0226	0.0055
5%	0.0277	0.0135
10%	0.0307	0.0197
50%	0.0415	0.0481
90%	0.0536	0.0902
95%	0.0571	0.1032
99%	0.0644	0.1319
max	0.0766	0.1841

Cross Sectional Volatility Over Time : BASE



US Treasury 17 Year Yield - Spot

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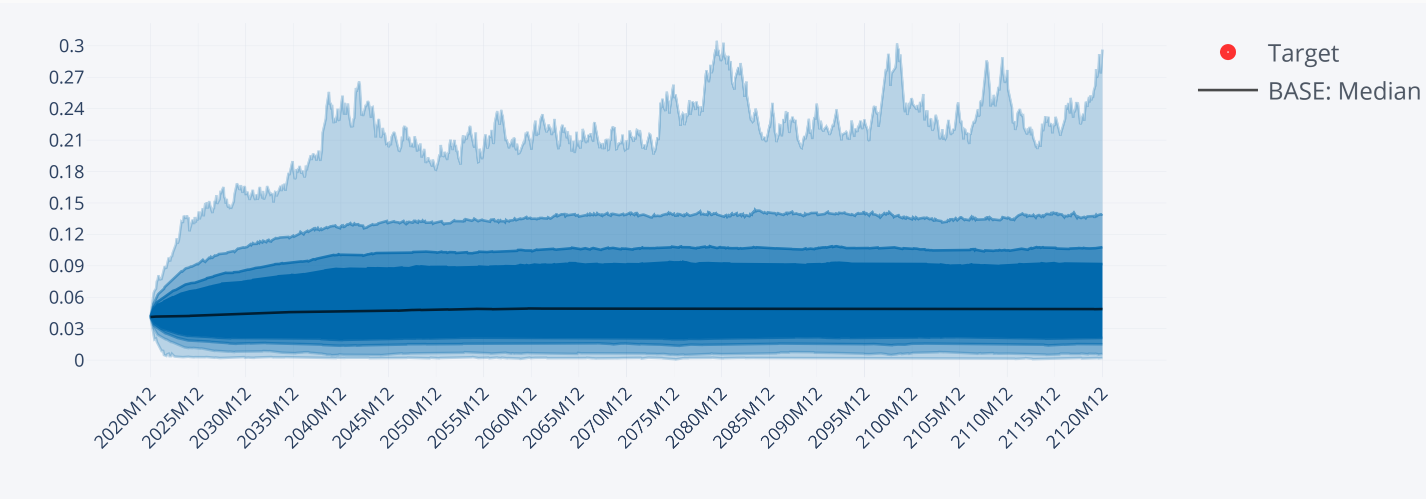
Simulated Data in Percentiles : US Treasury 17 Year Yield - Spot



Simulated Data: There are 1200 Time Periods. Percentiles, Mean and Median are calculated across 10000 PATHS.

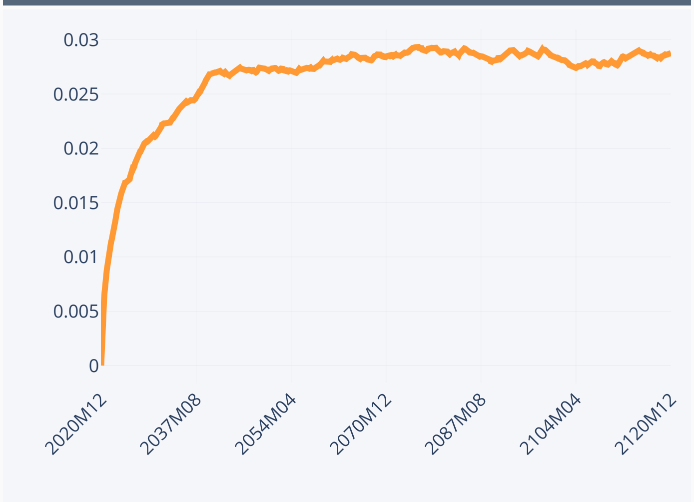
Percentiles Plotted : Min, 1%, 5%, 10%, 50%, 90%, 95%, 99%, Max

The distributions shown are across the paths for a given time period.

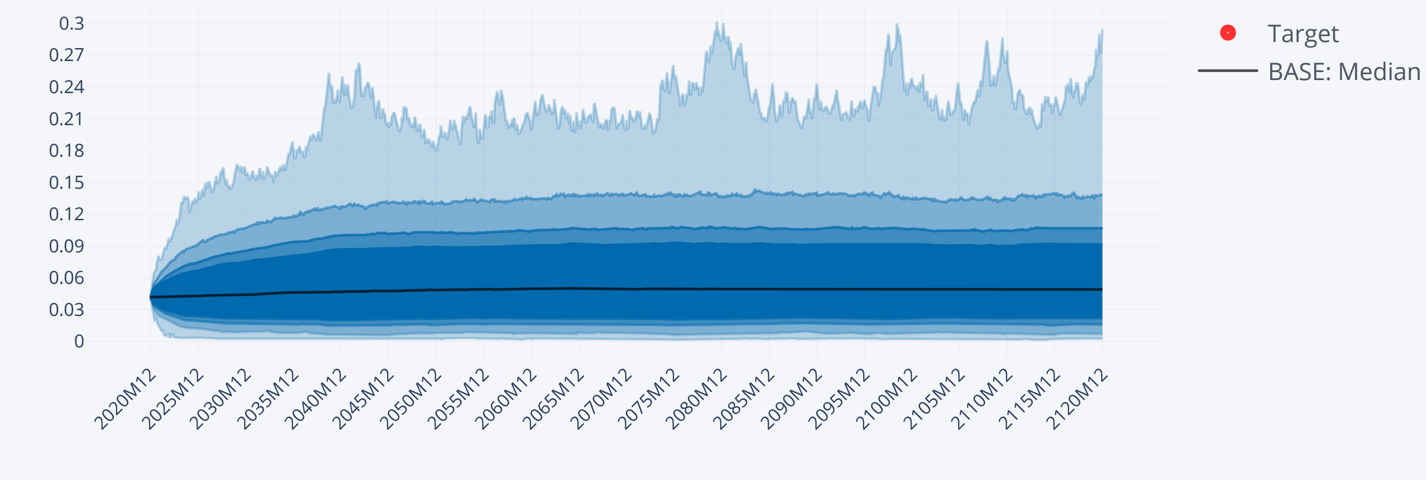
Simulation Summary

	BASE: 2021M12	BASE: 2050M12
mean	0.0420	0.0521
std	0.0089	0.0273
min	0.0097	0.0018
1%	0.0231	0.0066
5%	0.0281	0.0143
10%	0.0310	0.0205
50%	0.0416	0.0484
90%	0.0535	0.0899
95%	0.0570	0.1029
99%	0.0642	0.1312
max	0.0764	0.1817

Cross Sectional Volatility Over Time : BASE



Simulated Data in Percentiles : US Treasury 18 Year Yield - Spot

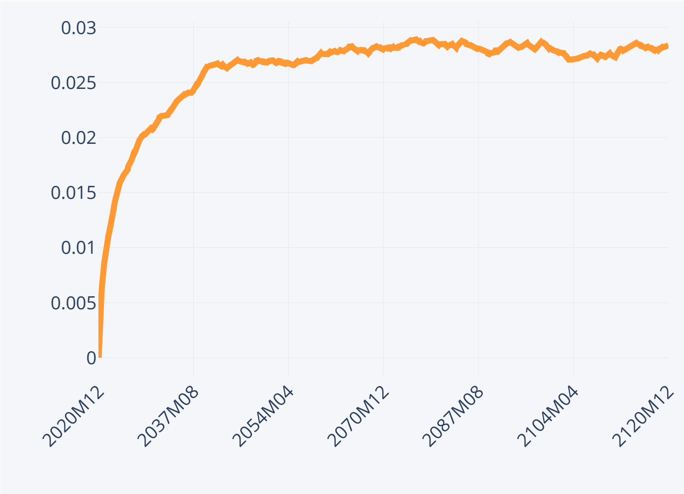


Simulated Data: There are 1200 Time Periods. Percentiles, Mean and Median are calculated across 10000 PATHS.
Percentiles Plotted : Min, 1%, 5%, 10%, 50%, 90%, 95%, 99%, Max
The distributions shown are across the paths for a given time period.

Simulation Summary

	BASE: 2021M12	BASE: 2050M12
mean	0.0421	0.0523
std	0.0087	0.0270
min	0.0105	0.0021
1%	0.0235	0.0076
5%	0.0285	0.0152
10%	0.0313	0.0211
50%	0.0417	0.0486
90%	0.0534	0.0896
95%	0.0568	0.1024
99%	0.0639	0.1304
max	0.0761	0.1794

Cross Sectional Volatility Over Time : BASE



US Treasury 19 Year Yield - Spot

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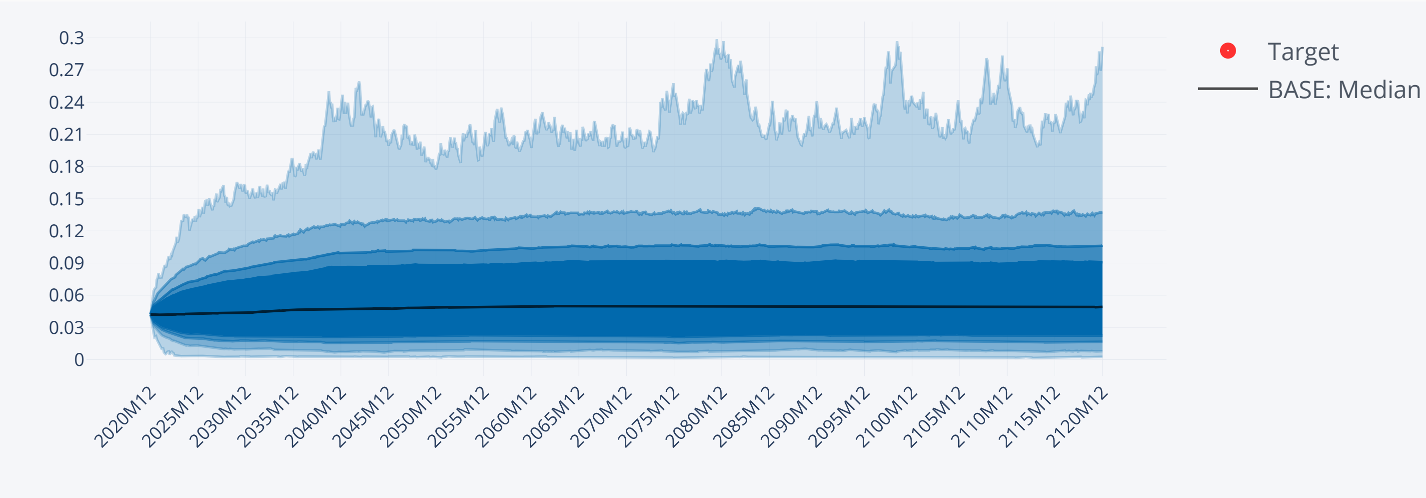
Simulated Data in Percentiles : US Treasury 19 Year Yield - Spot

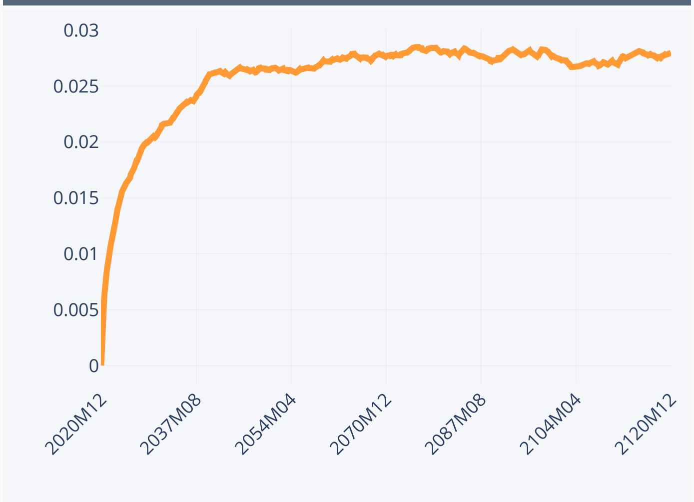


Simulated Data: There are 1200 Time Periods. Percentiles, Mean and Median are calculated across 10000 PATHS.
Percentiles Plotted : Min, 1%, 5%, 10%, 50%, 90%, 95%, 99%, Max
The distributions shown are across the paths for a given time period.

Simulation Summary

	BASE: 2021M12	BASE: 2050M12
mean	0.0422	0.0524
std	0.0086	0.0266
min	0.0112	0.0023
1%	0.0240	0.0085
5%	0.0289	0.0159
10%	0.0316	0.0217
50%	0.0418	0.0487
90%	0.0533	0.0892
95%	0.0567	0.1019
99%	0.0635	0.1294
max	0.0758	0.1771

Cross Sectional Volatility Over Time : BASE



US Treasury 20 Year Yield - Spot

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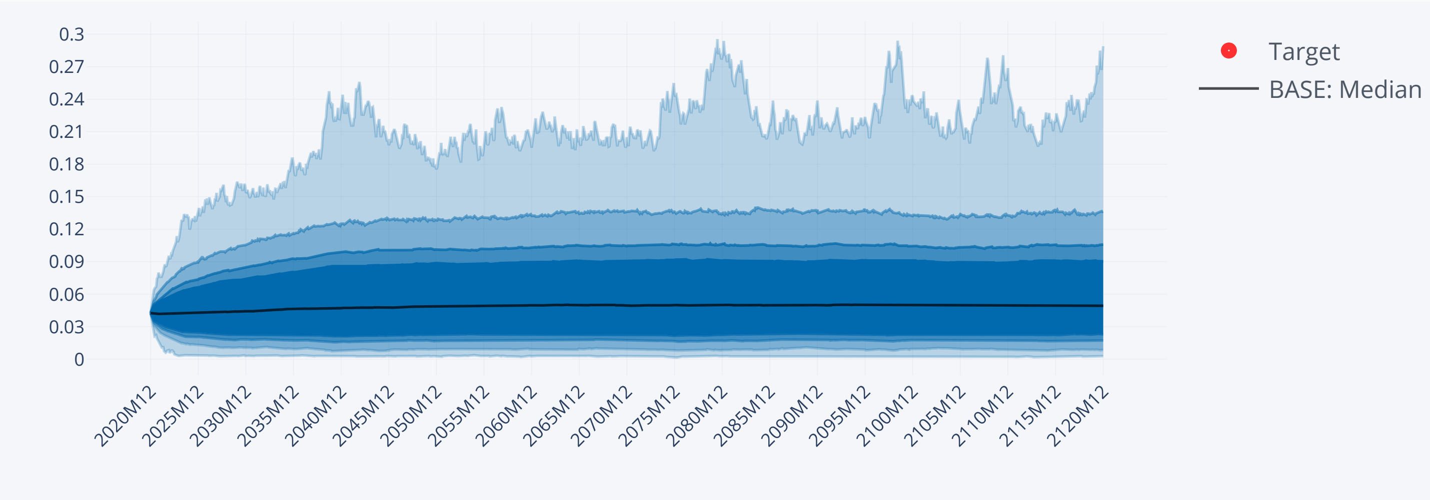
Simulated Data in Percentiles : US Treasury 20 Year Yield - Spot

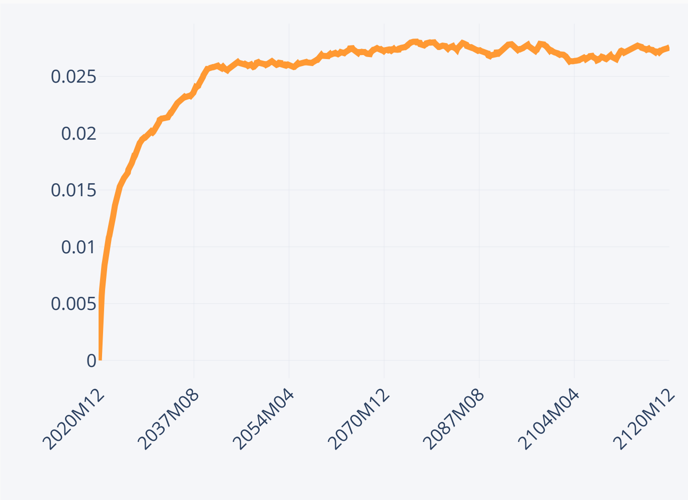


Simulated Data: There are 1200 Time Periods. Percentiles, Mean and Median are calculated across 10000 PATHS.
Percentiles Plotted : Min, 1%, 5%, 10%, 50%, 90%, 95%, 99%, Max
The distributions shown are across the paths for a given time period.

Simulation Summary

	BASE: 2021M12	BASE: 2050M12
mean	0.0422	0.0525
std	0.0084	0.0262
min	0.0119	0.0026
1%	0.0244	0.0093
5%	0.0291	0.0166
10%	0.0318	0.0223
50%	0.0418	0.0489
90%	0.0531	0.0887
95%	0.0564	0.1013
99%	0.0632	0.1282
max	0.0754	0.1753

Cross Sectional Volatility Over Time : BASE



US Treasury 21 Year Yield - Spot

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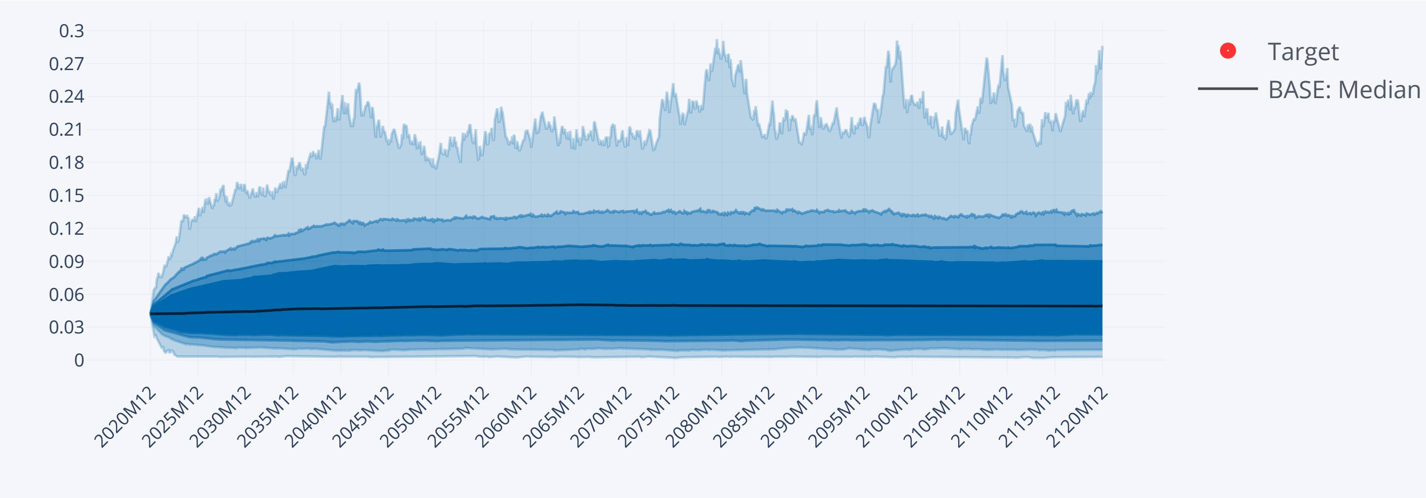
Simulated Data in Percentiles : US Treasury 21 Year Yield - Spot

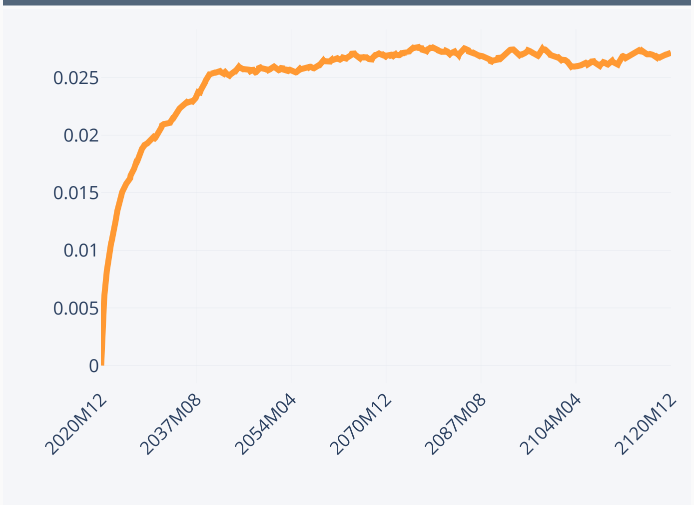


Simulated Data: There are 1200 Time Periods. Percentiles, Mean and Median are calculated across 10000 PATHS.
Percentiles Plotted : Min, 1%, 5%, 10%, 50%, 90%, 95%, 99%, Max
The distributions shown are across the paths for a given time period.

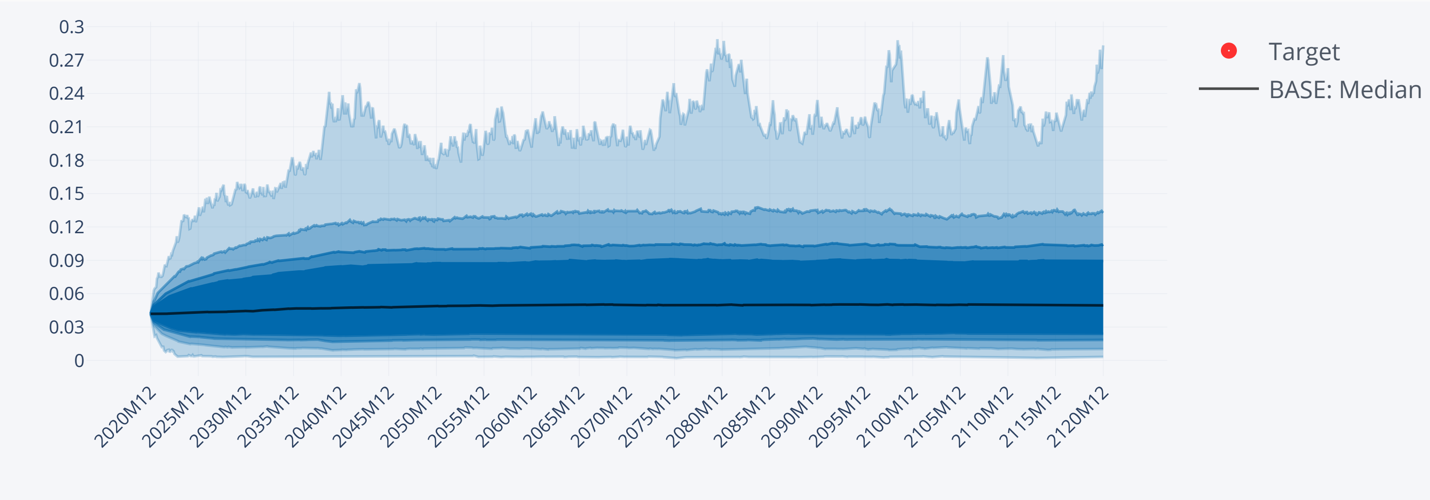
Simulation Summary

	BASE: 2021M12	BASE: 2050M12
mean	0.0422	0.0526
std	0.0083	0.0258
min	0.0125	0.0028
1%	0.0247	0.0100
5%	0.0294	0.0172
10%	0.0320	0.0228
50%	0.0418	0.0490
90%	0.0529	0.0883
95%	0.0562	0.1007
99%	0.0629	0.1274
max	0.0750	0.1737

Cross Sectional Volatility Over Time : BASE



Simulated Data in Percentiles : US Treasury 22 Year Yield - Spot

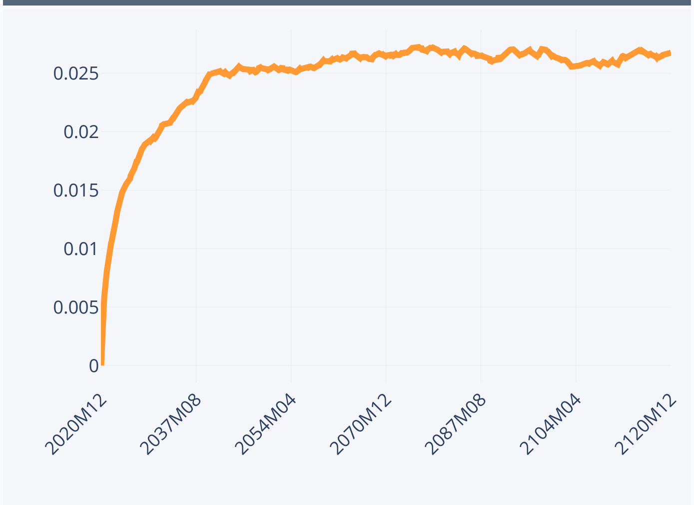


Simulated Data: There are 1200 Time Periods. Percentiles, Mean and Median are calculated across 10000 PATHS.
Percentiles Plotted : Min, 1%, 5%, 10%, 50%, 90%, 95%, 99%, Max
The distributions shown are across the paths for a given time period.

Simulation Summary

	BASE: 2021M12	BASE: 2050M12
mean	0.0422	0.0526
std	0.0081	0.0254
min	0.0131	0.0030
1%	0.0250	0.0107
5%	0.0296	0.0177
10%	0.0321	0.0233
50%	0.0418	0.0491
90%	0.0527	0.0878
95%	0.0560	0.1000
99%	0.0626	0.1265
max	0.0746	0.1721

Cross Sectional Volatility Over Time : BASE



US Treasury 23 Year Yield - Spot

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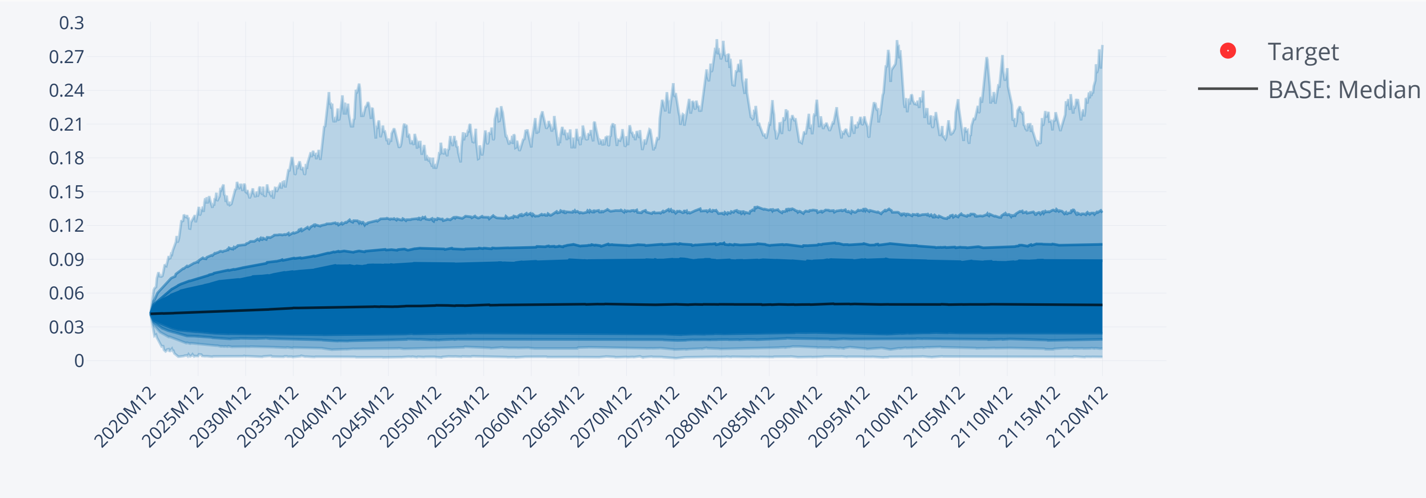
Simulated Data in Percentiles : US Treasury 23 Year Yield - Spot

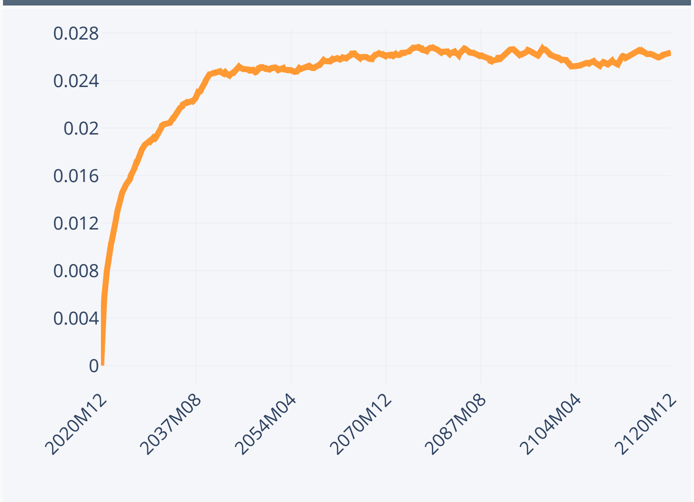


Simulated Data: There are 1200 Time Periods. Percentiles, Mean and Median are calculated across 10000 PATHS.
Percentiles Plotted : Min, 1%, 5%, 10%, 50%, 90%, 95%, 99%, Max
The distributions shown are across the paths for a given time period.

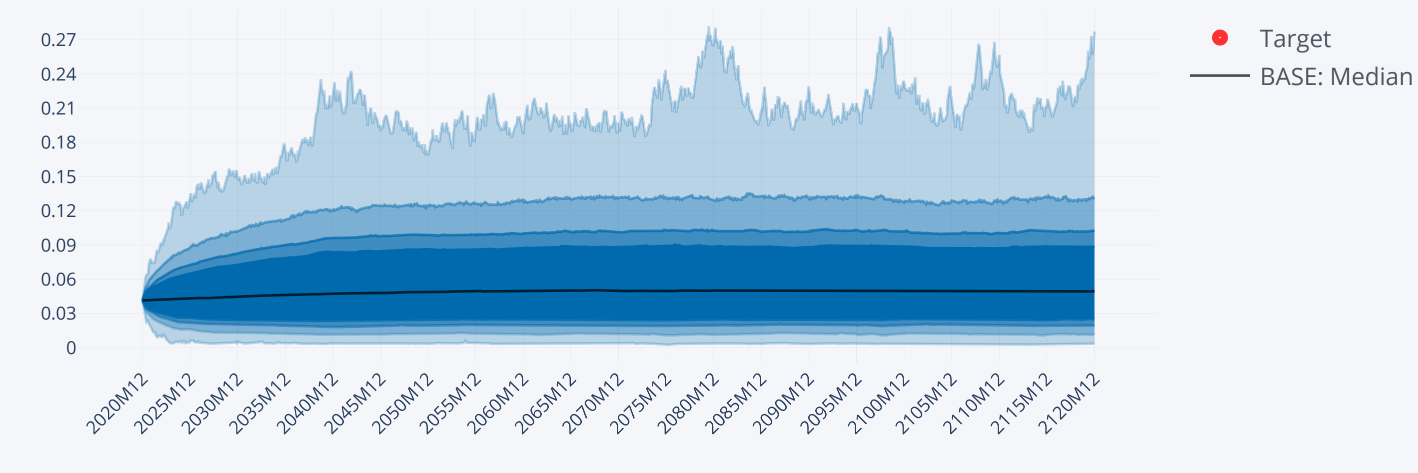
Simulation Summary

	BASE: 2021M12	BASE: 2050M12
mean	0.0422	0.0526
std	0.0080	0.0251
min	0.0137	0.0032
1%	0.0253	0.0113
5%	0.0298	0.0182
10%	0.0323	0.0237
50%	0.0418	0.0491
90%	0.0526	0.0873
95%	0.0557	0.0994
99%	0.0622	0.1252
max	0.0742	0.1705

Cross Sectional Volatility Over Time : BASE



Simulated Data in Percentiles : US Treasury 24 Year Yield - Spot

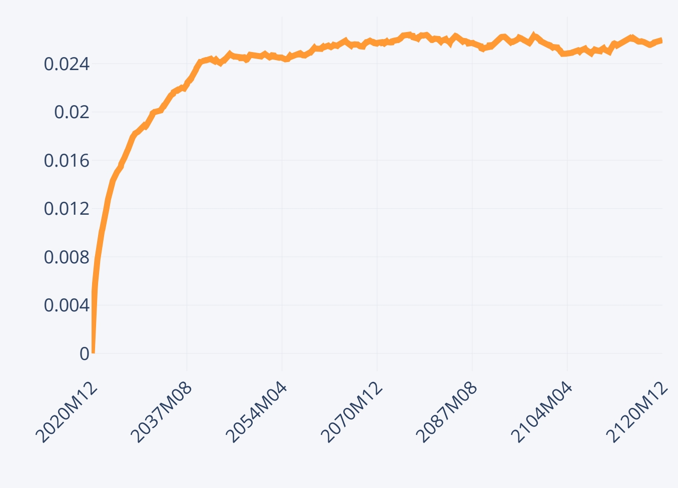


Simulated Data: There are 1200 Time Periods. Percentiles, Mean and Median are calculated across 10000 PATHS.
Percentiles Plotted : Min, 1%, 5%, 10%, 50%, 90%, 95%, 99%, Max
The distributions shown are across the paths for a given time period.

Simulation Summary

	BASE: 2021M12	BASE: 2050M12
mean	0.0422	0.0525
std	0.0078	0.0247
min	0.0142	0.0033
1%	0.0255	0.0119
5%	0.0300	0.0187
10%	0.0324	0.0241
50%	0.0418	0.0491
90%	0.0524	0.0867
95%	0.0554	0.0986
99%	0.0619	0.1241
max	0.0737	0.1688

Cross Sectional Volatility Over Time : BASE



US Treasury 25 Year Yield - Spot

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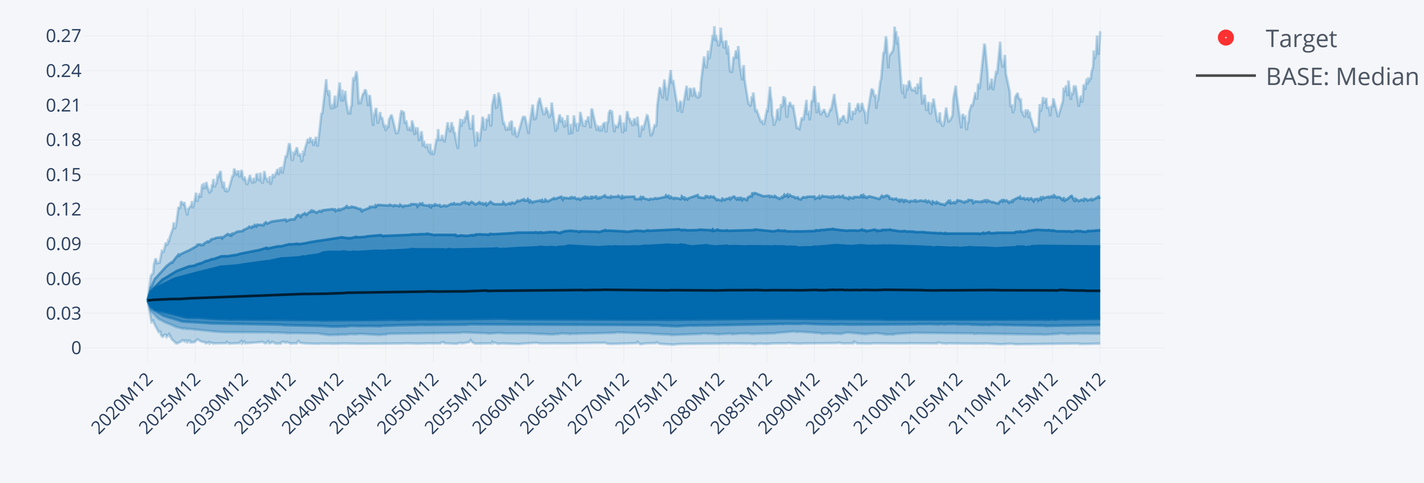
Simulated Data in Percentiles : US Treasury 25 Year Yield - Spot

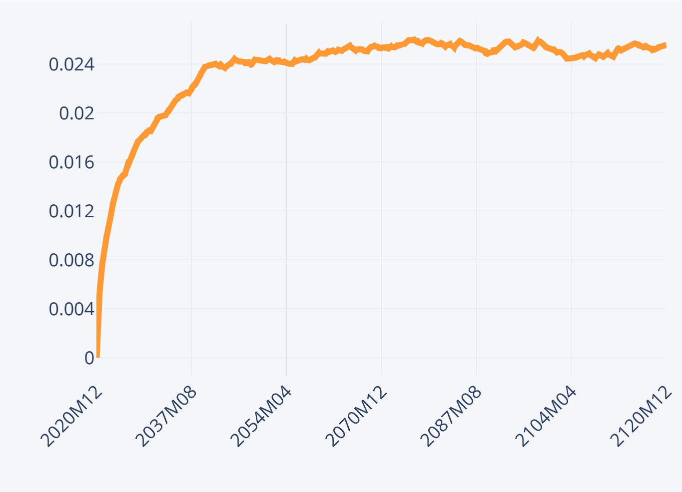


Simulated Data: There are 1200 Time Periods. Percentiles, Mean and Median are calculated across 10000 PATHS.
Percentiles Plotted : Min, 1%, 5%, 10%, 50%, 90%, 95%, 99%, Max
The distributions shown are across the paths for a given time period.

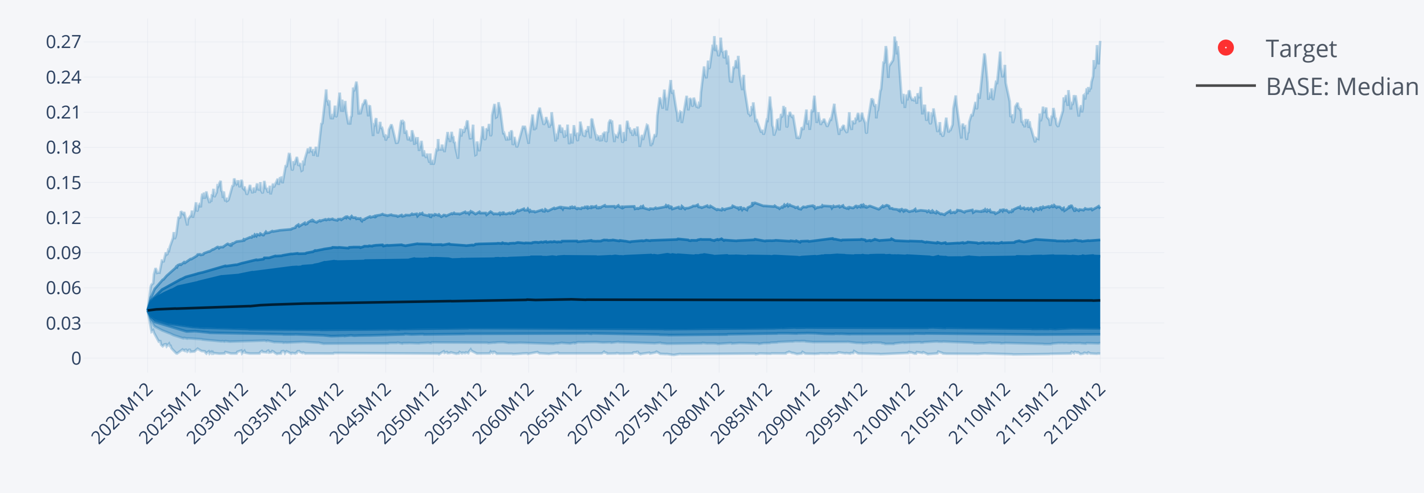
Simulation Summary

	BASE: 2021M12	BASE: 2050M12
mean	0.0421	0.0525
std	0.0077	0.0243
min	0.0147	0.0035
1%	0.0257	0.0126
5%	0.0302	0.0192
10%	0.0325	0.0245
50%	0.0417	0.0491
90%	0.0521	0.0862
95%	0.0552	0.0979
99%	0.0615	0.1231
max	0.0732	0.1670

Cross Sectional Volatility Over Time : BASE



Simulated Data in Percentiles : US Treasury 26 Year Yield - Spot

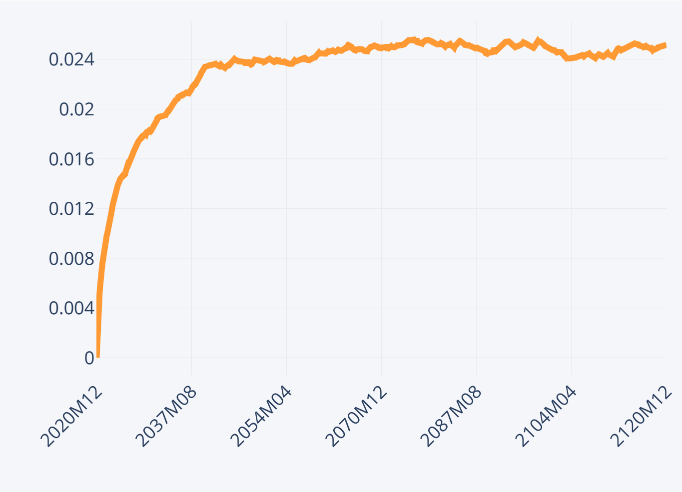


Simulated Data: There are 1200 Time Periods. Percentiles, Mean and Median are calculated across 10000 PATHS.
Percentiles Plotted : Min, 1%, 5%, 10%, 50%, 90%, 95%, 99%, Max
The distributions shown are across the paths for a given time period.

Simulation Summary

	BASE: 2021M12	BASE: 2050M12
mean	0.0421	0.0524
std	0.0076	0.0239
min	0.0152	0.0037
1%	0.0260	0.0132
5%	0.0303	0.0197
10%	0.0327	0.0248
50%	0.0416	0.0491
90%	0.0519	0.0855
95%	0.0549	0.0971
99%	0.0611	0.1220
max	0.0728	0.1653

Cross Sectional Volatility Over Time : BASE



US Treasury 27 Year Yield - Spot

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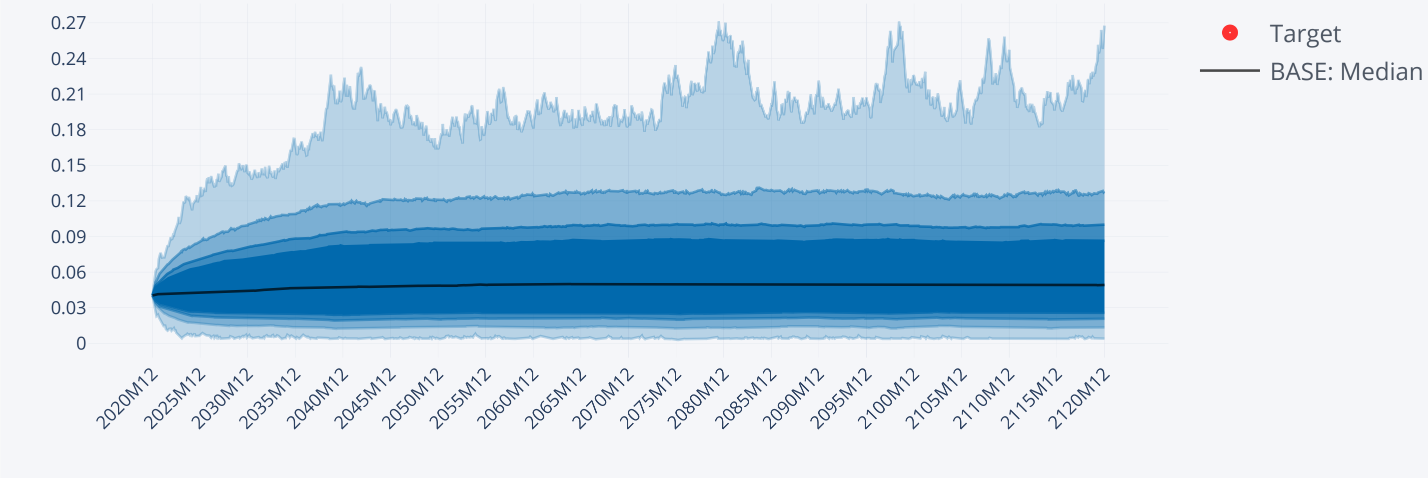
Simulated Data in Percentiles : US Treasury 27 Year Yield - Spot

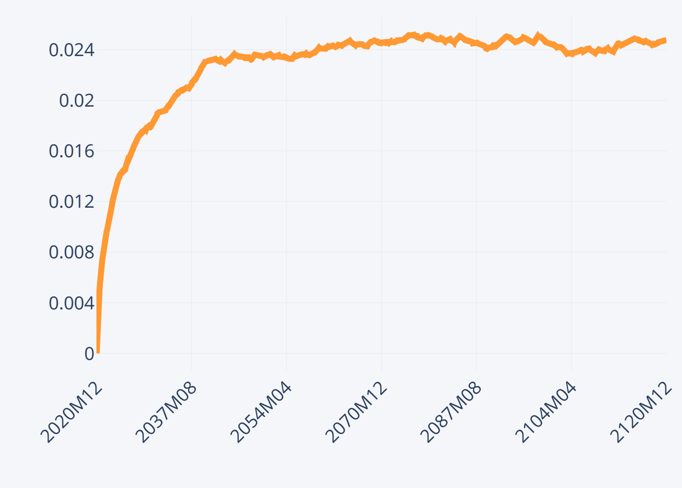


Simulated Data: There are 1200 Time Periods. Percentiles, Mean and Median are calculated across 10000 PATHS.
Percentiles Plotted : Min, 1%, 5%, 10%, 50%, 90%, 95%, 99%, Max
The distributions shown are across the paths for a given time period.

Simulation Summary

	BASE: 2021M12	BASE: 2050M12
mean	0.0420	0.0522
std	0.0075	0.0236
min	0.0156	0.0038
1%	0.0262	0.0137
5%	0.0305	0.0201
10%	0.0327	0.0251
50%	0.0416	0.0489
90%	0.0517	0.0848
95%	0.0546	0.0961
99%	0.0607	0.1209
max	0.0722	0.1635

Cross Sectional Volatility Over Time : BASE



US Treasury 28 Year Yield - Spot

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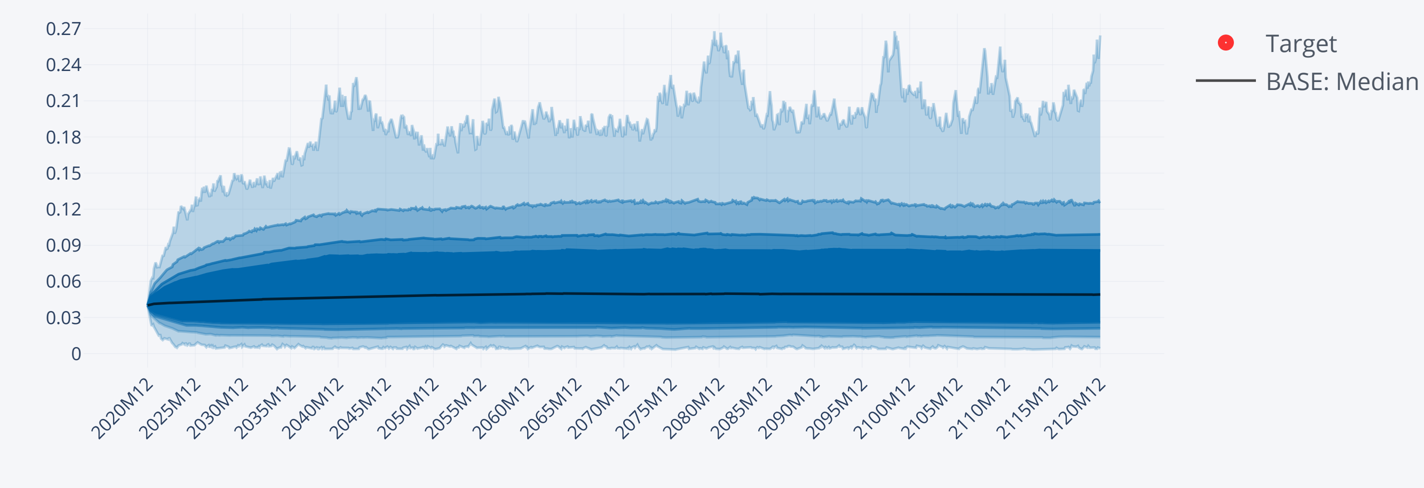
Simulated Data in Percentiles : US Treasury 28 Year Yield - Spot

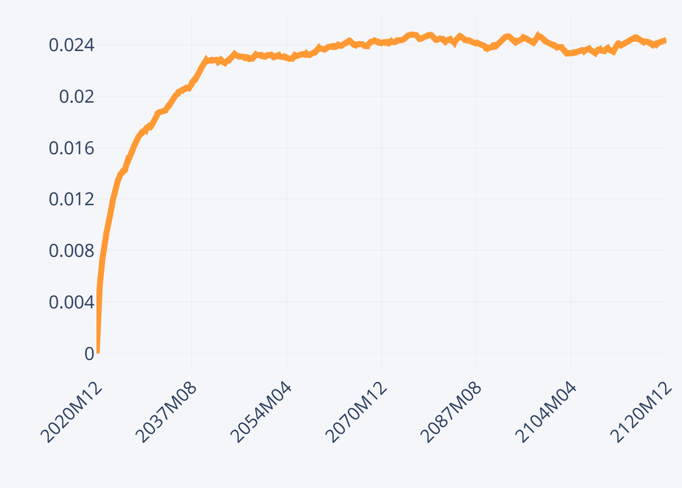


Simulated Data: There are 1200 Time Periods. Percentiles, Mean and Median are calculated across 10000 PATHS.
Percentiles Plotted : Min, 1%, 5%, 10%, 50%, 90%, 95%, 99%, Max
The distributions shown are across the paths for a given time period.

Simulation Summary

	BASE: 2021M12	BASE: 2050M12
mean	0.0419	0.0521
std	0.0073	0.0232
min	0.0160	0.0040
1%	0.0264	0.0143
5%	0.0306	0.0204
10%	0.0328	0.0254
50%	0.0415	0.0488
90%	0.0514	0.0842
95%	0.0543	0.0953
99%	0.0603	0.1197
max	0.0717	0.1617

Cross Sectional Volatility Over Time : BASE



US Treasury 29 Year Yield - Spot
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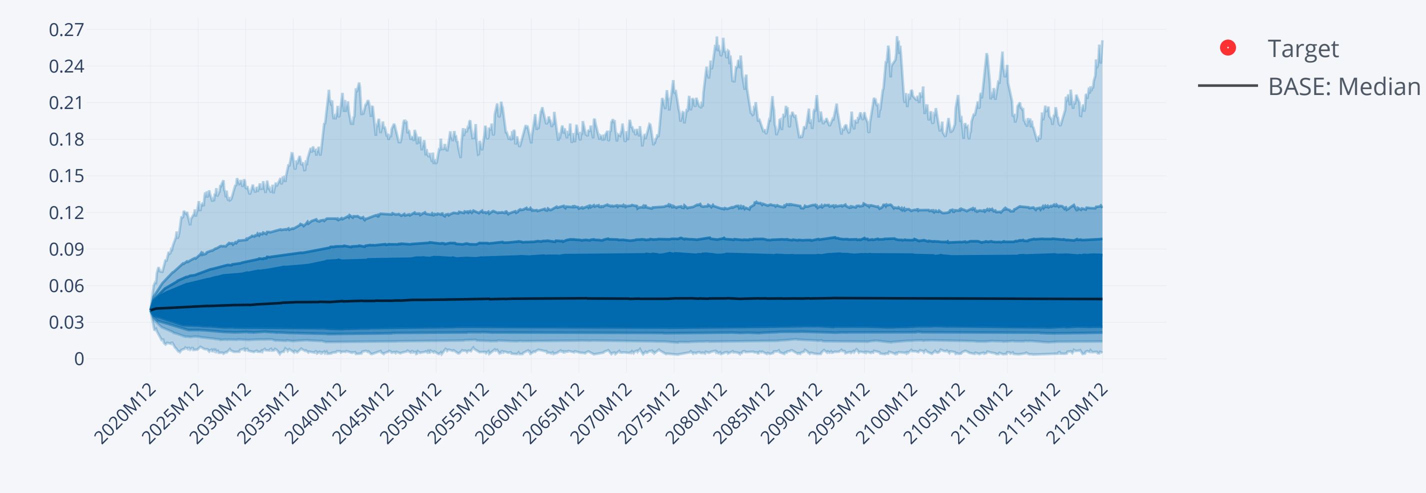
Simulated Data in Percentiles : US Treasury 29 Year Yield - Spot

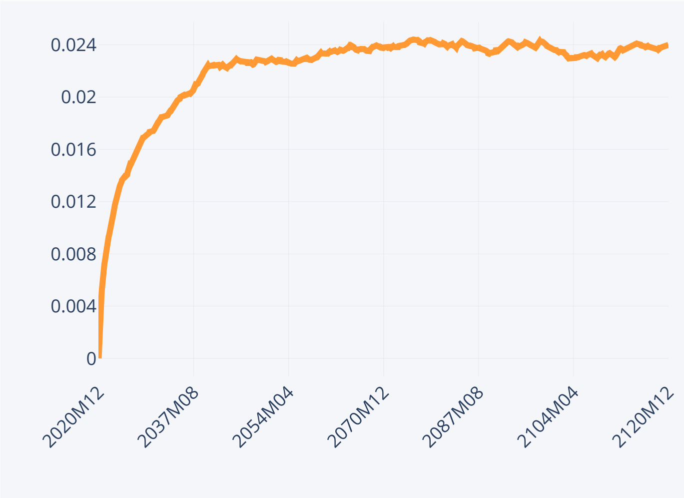


Simulated Data: There are 1200 Time Periods. Percentiles, Mean and Median are calculated across 10000 PATHS.
Percentiles Plotted : Min, 1%, 5%, 10%, 50%, 90%, 95%, 99%, Max
The distributions shown are across the paths for a given time period.

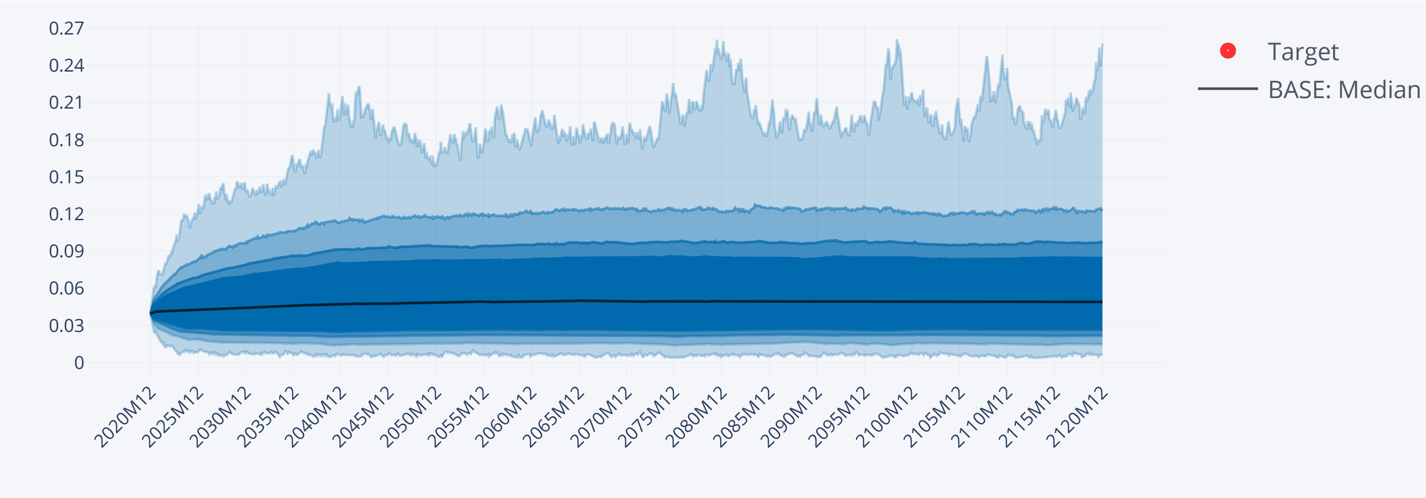
Simulation Summary

	BASE: 2021M12	BASE: 2050M12
mean	0.0418	0.0519
std	0.0072	0.0228
min	0.0164	0.0045
1%	0.0265	0.0148
5%	0.0307	0.0208
10%	0.0329	0.0256
50%	0.0414	0.0487
90%	0.0512	0.0835
95%	0.0541	0.0944
99%	0.0599	0.1185
max	0.0712	0.1598

Cross Sectional Volatility Over Time : BASE



Simulated Data in Percentiles : US Treasury 30 Year Yield - Spot

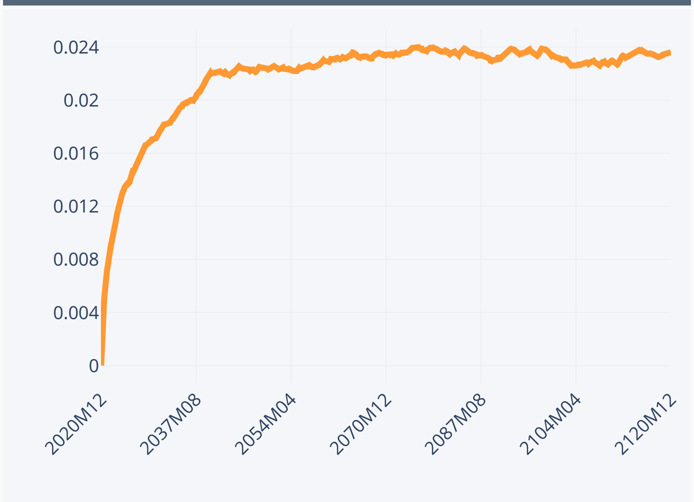


Simulated Data: There are 1200 Time Periods. Percentiles, Mean and Median are calculated across 10000 PATHS.
Percentiles Plotted : Min, 1%, 5%, 10%, 50%, 90%, 95%, 99%, Max
The distributions shown are across the paths for a given time period.

Simulation Summary

	BASE: 2021M12	BASE: 2050M12
mean	0.0417	0.0518
std	0.0071	0.0225
min	0.0168	0.0052
1%	0.0267	0.0152
5%	0.0308	0.0212
10%	0.0329	0.0259
50%	0.0413	0.0486
90%	0.0509	0.0829
95%	0.0537	0.0936
99%	0.0595	0.1173
max	0.0707	0.1580

Cross Sectional Volatility Over Time : BASE



US Treasury 1 Month Yield - Coupon
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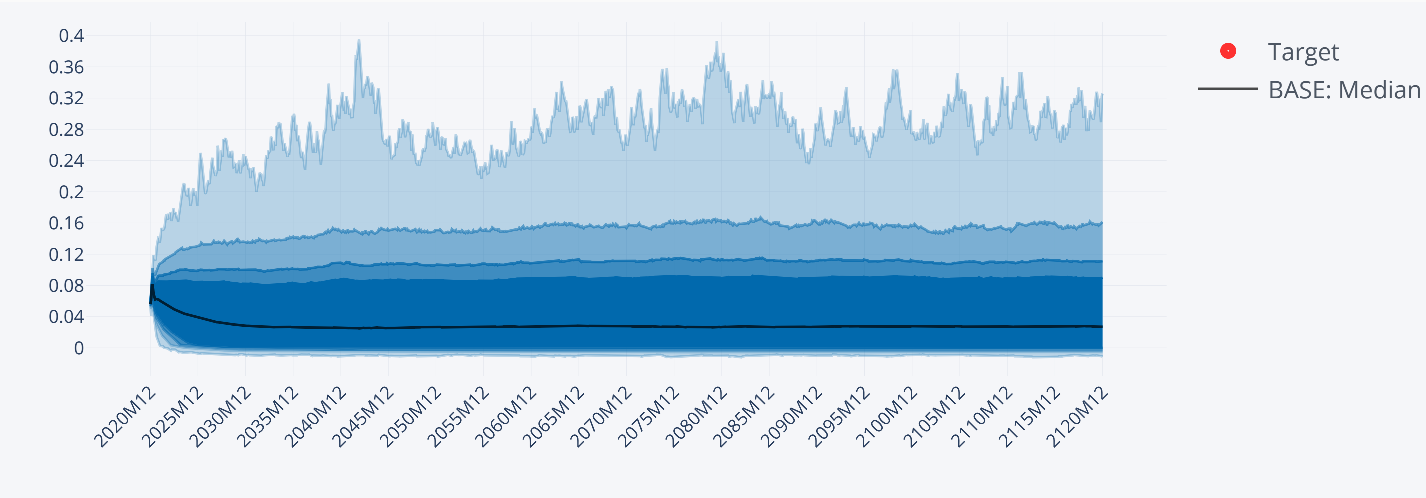
Dec 2023 - Academy
Calibration
Validation Report

Simulated Data in Percentiles : US Treasury 1 Month Yield - Coupon

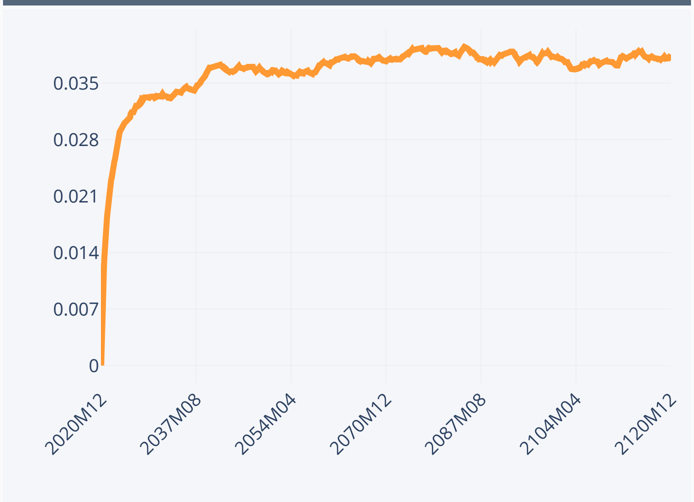


Simulated Data: There are 1200 Time Periods. Percentiles, Mean and Median are calculated across 10000 PATHS.
Percentiles Plotted : Min, 1%, 5%, 10%, 50%, 90%, 95%, 99%, Max
The distributions shown are across the paths for a given time period.

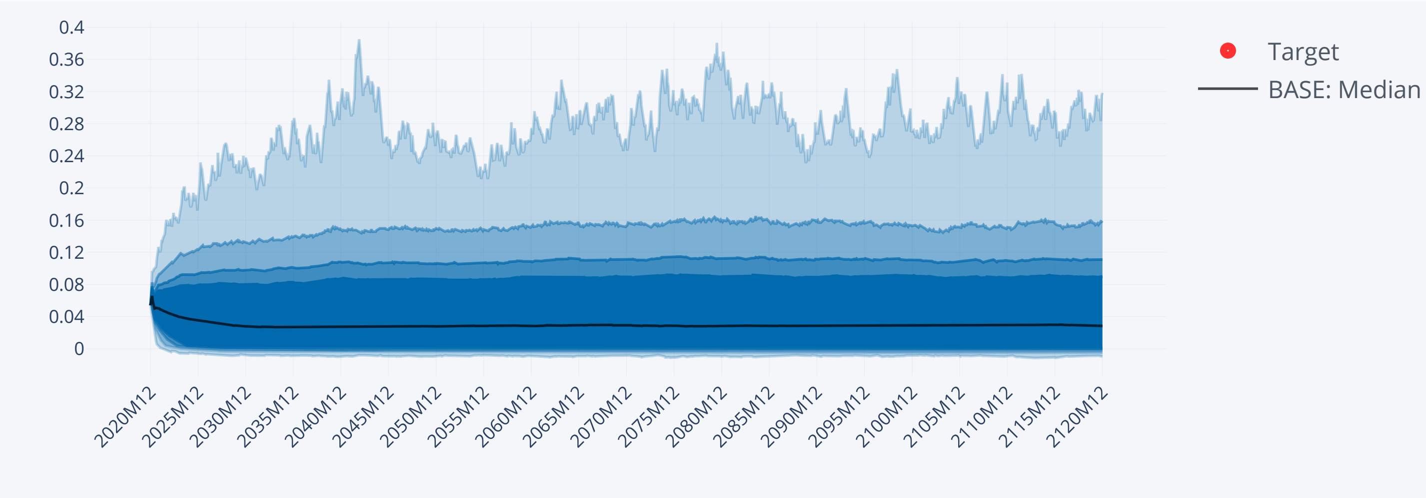
Simulation Summary

	BASE: 2021M12	BASE: 2050M12
mean	0.0613	0.0356
std	0.0181	0.0365
min	0.0031	-0.0098
1%	0.0224	-0.0050
5%	0.0326	-0.0021
10%	0.0385	-0.0002
50%	0.0605	0.0264
90%	0.0847	0.0870
95%	0.0922	0.1060
99%	0.1078	0.1509
max	0.1344	0.2762

Cross Sectional Volatility Over Time : BASE



Simulated Data in Percentiles : US Treasury 3 Month Yield - Coupon

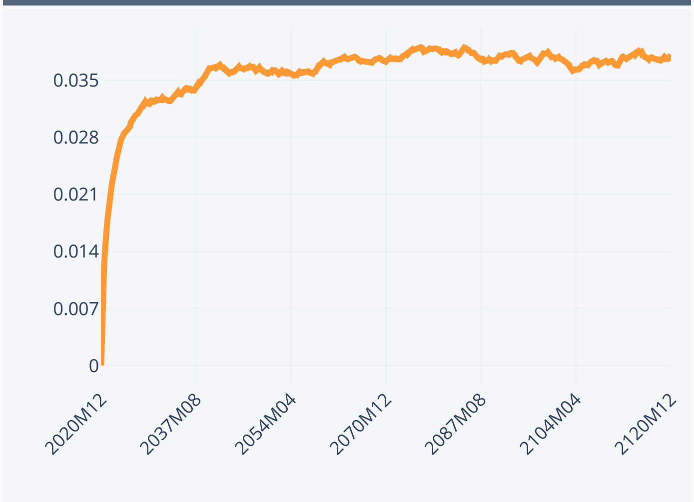


Simulated Data: There are 1200 Time Periods. Percentiles, Mean and Median are calculated across 10000 PATHS.
Percentiles Plotted : Min, 1%, 5%, 10%, 50%, 90%, 95%, 99%, Max
The distributions shown are across the paths for a given time period.

Simulation Summary

	BASE: 2021M12	BASE: 2050M12
mean	0.0497	0.0364
std	0.0172	0.0362
min	0.0014	-0.0089
1%	0.0129	-0.0045
5%	0.0225	-0.0017
10%	0.0283	0.0003
50%	0.0491	0.0278
90%	0.0721	0.0875
95%	0.0790	0.1056
99%	0.0932	0.1498
max	0.1200	0.2661

Cross Sectional Volatility Over Time : BASE



US Treasury 6 Month Yield - Coupon

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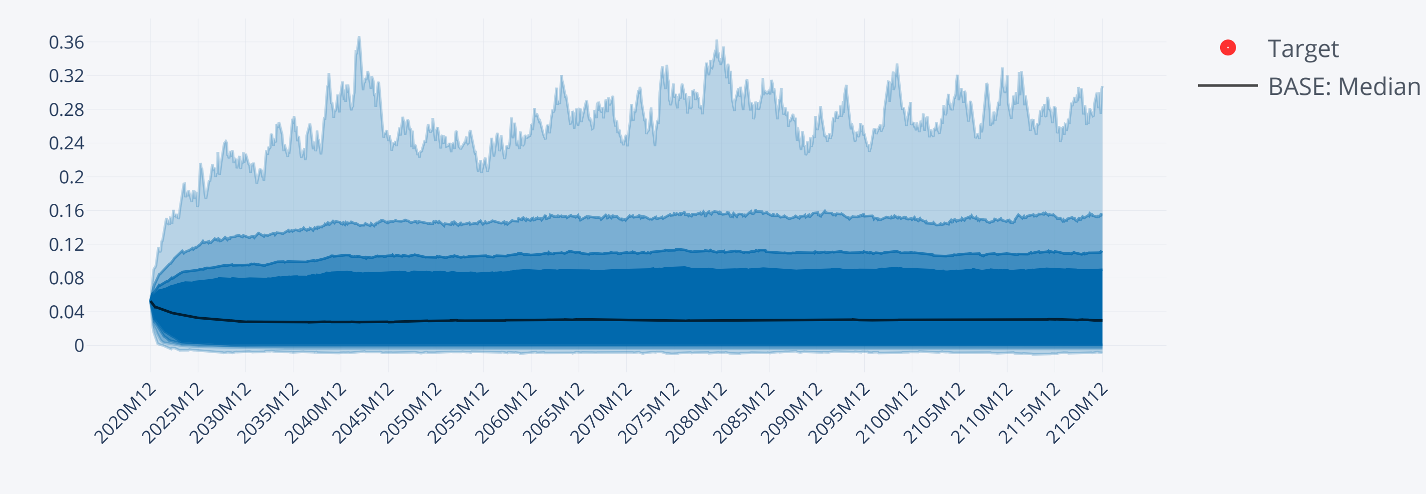
Simulated Data in Percentiles : US Treasury 6 Month Yield - Coupon

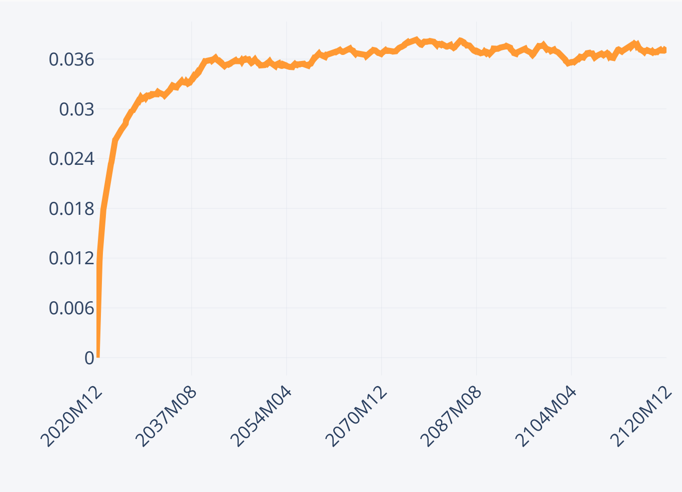


Simulated Data: There are 1200 Time Periods. Percentiles, Mean and Median are calculated across 10000 PATHS.
Percentiles Plotted : Min, 1%, 5%, 10%, 50%, 90%, 95%, 99%, Max
The distributions shown are across the paths for a given time period.

Simulation Summary

	BASE: 2021M12	BASE: 2050M12
mean	0.0433	0.0370
std	0.0165	0.0355
min	0.0006	-0.0084
1%	0.0077	-0.0040
5%	0.0170	-0.0013
10%	0.0227	0.0006
50%	0.0429	0.0290
90%	0.0649	0.0868
95%	0.0711	0.1044
99%	0.0846	0.1472
max	0.1107	0.2542

Cross Sectional Volatility Over Time : BASE



US Treasury 1 Year Yield - Coupon
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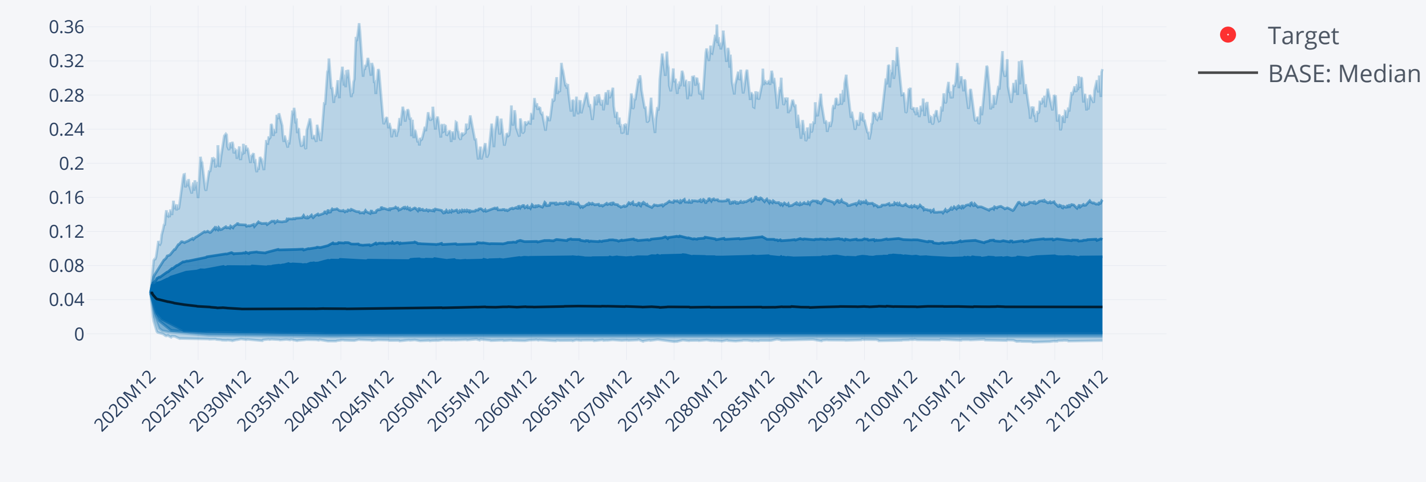
Simulated Data in Percentiles : US Treasury 1 Year Yield - Coupon

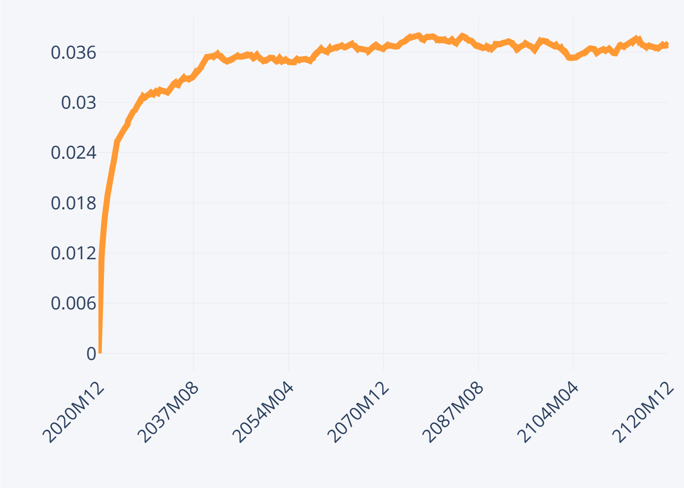


Simulated Data: There are 1200 Time Periods. Percentiles, Mean and Median are calculated across 10000 PATHS.
Percentiles Plotted : Min, 1%, 5%, 10%, 50%, 90%, 95%, 99%, Max
The distributions shown are across the paths for a given time period.

Simulation Summary

	BASE: 2021M12	BASE: 2050M12
mean	0.0397	0.0382
std	0.0158	0.0353
min	0.0002	-0.0078
1%	0.0056	-0.0034
5%	0.0144	-0.0007
10%	0.0199	0.0011
50%	0.0393	0.0307
90%	0.0604	0.0875
95%	0.0664	0.1046
99%	0.0792	0.1460
max	0.1048	0.2504

Cross Sectional Volatility Over Time : BASE



US Treasury 2 Year Yield - Coupon
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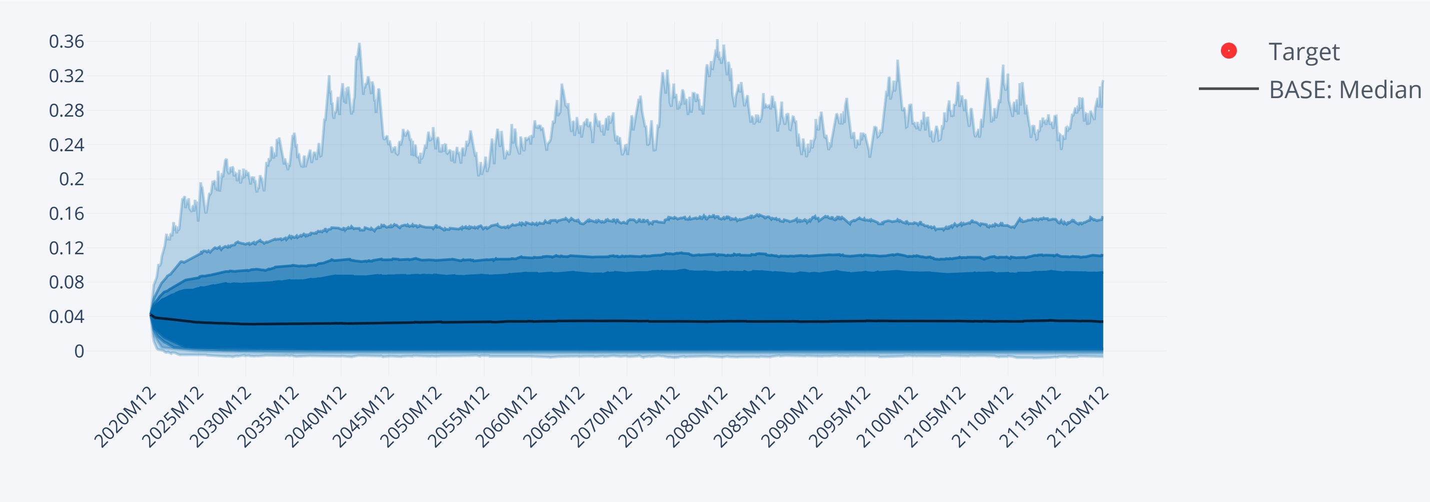
Simulated Data in Percentiles : US Treasury 2 Year Yield - Coupon

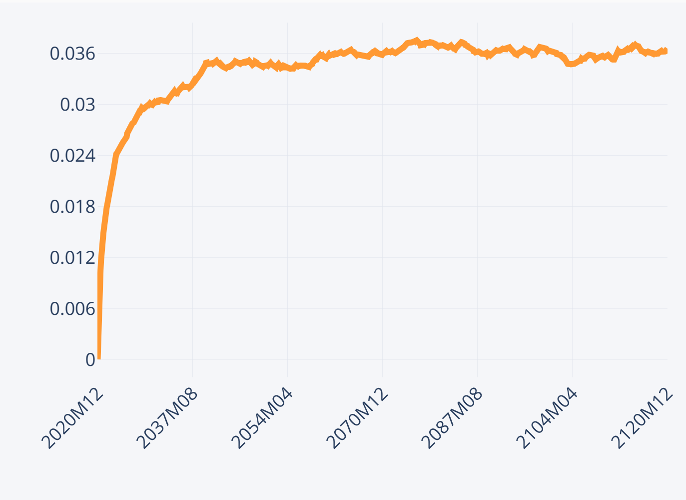


Simulated Data: There are 1200 Time Periods. Percentiles, Mean and Median are calculated across 10000 PATHS.
Percentiles Plotted : Min, 1%, 5%, 10%, 50%, 90%, 95%, 99%, Max
The distributions shown are across the paths for a given time period.

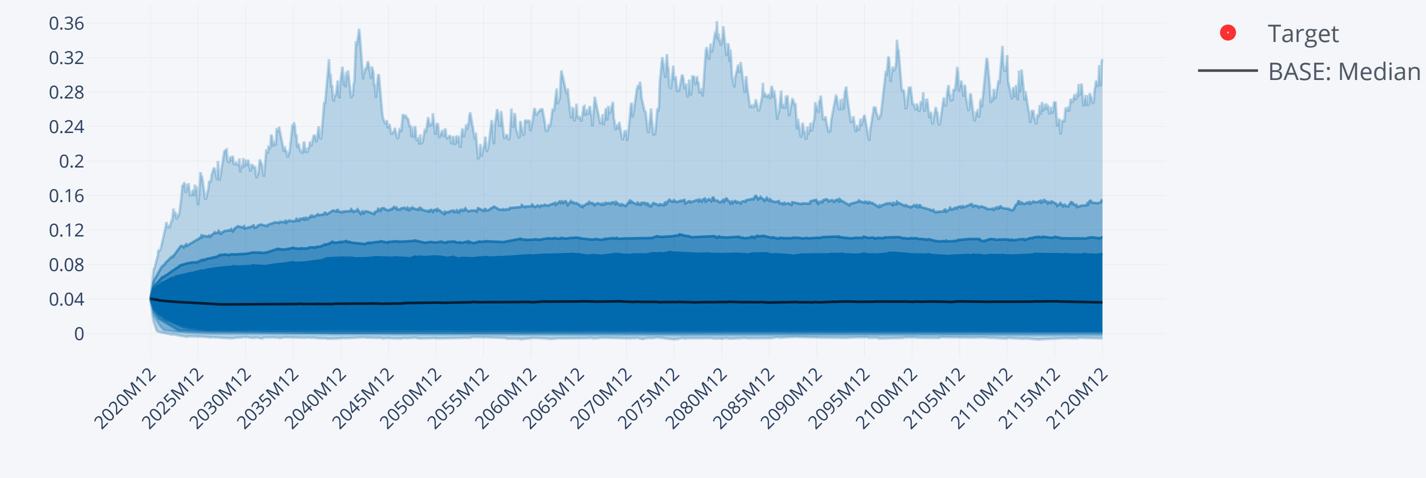
Simulation Summary

	BASE: 2021M12	BASE: 2050M12
mean	0.0386	0.0401
std	0.0148	0.0347
min	0.0006	-0.0067
1%	0.0068	-0.0023
5%	0.0149	0.0002
10%	0.0201	0.0020
50%	0.0382	0.0335
90%	0.0580	0.0884
95%	0.0638	0.1049
99%	0.0758	0.1466
max	0.0998	0.2445

Cross Sectional Volatility Over Time : BASE



Simulated Data in Percentiles : US Treasury 3 Year Yield - Coupon

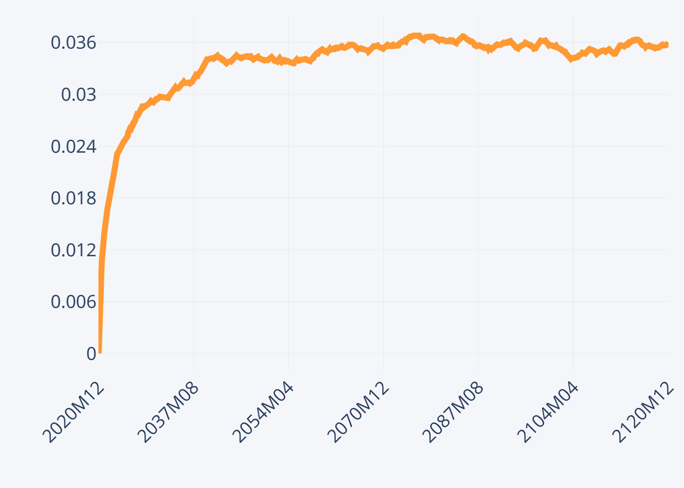


Simulated Data: There are 1200 Time Periods. Percentiles, Mean and Median are calculated across 10000 PATHS.
Percentiles Plotted : Min, 1%, 5%, 10%, 50%, 90%, 95%, 99%, Max
The distributions shown are across the paths for a given time period.

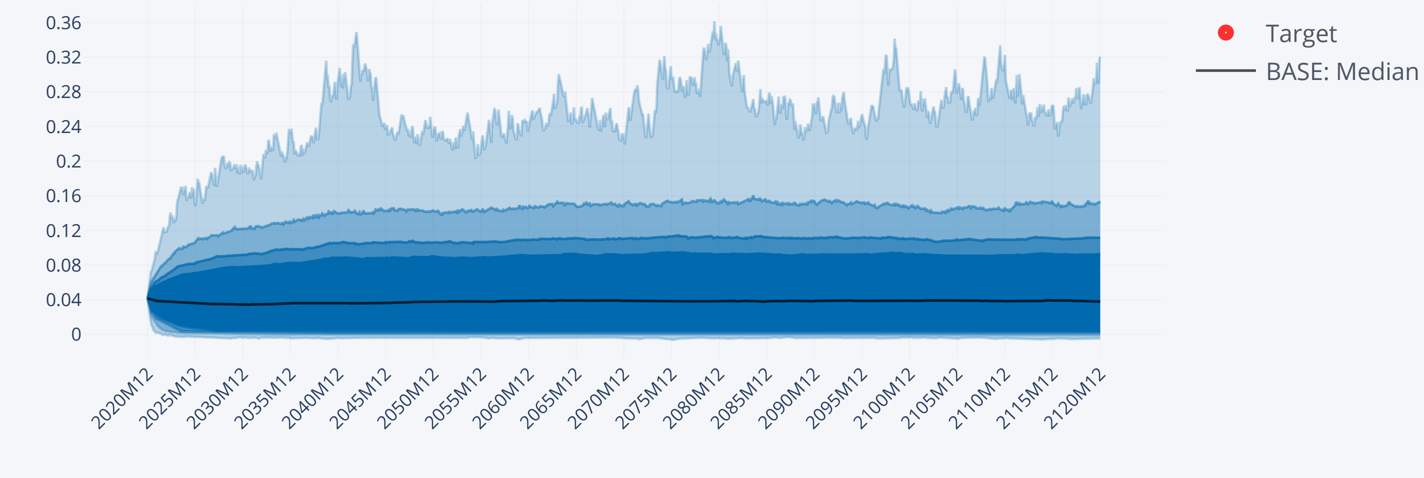
Simulation Summary

	BASE: 2021M12	BASE: 2050M12
mean	0.0389	0.0418
std	0.0140	0.0341
min	0.0011	-0.0056
1%	0.0087	-0.0015
5%	0.0166	0.0010
10%	0.0213	0.0027
50%	0.0384	0.0357
90%	0.0571	0.0890
95%	0.0625	0.1057
99%	0.0740	0.1438
max	0.0966	0.2398

Cross Sectional Volatility Over Time : BASE



Simulated Data in Percentiles : US Treasury 4 Year Yield - Coupon

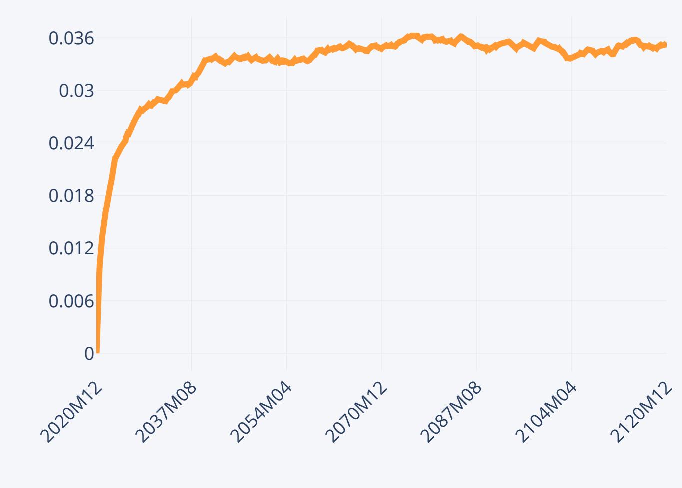


Simulated Data: There are 1200 Time Periods. Percentiles, Mean and Median are calculated across 10000 PATHS.
Percentiles Plotted : Min, 1%, 5%, 10%, 50%, 90%, 95%, 99%, Max
The distributions shown are across the paths for a given time period.

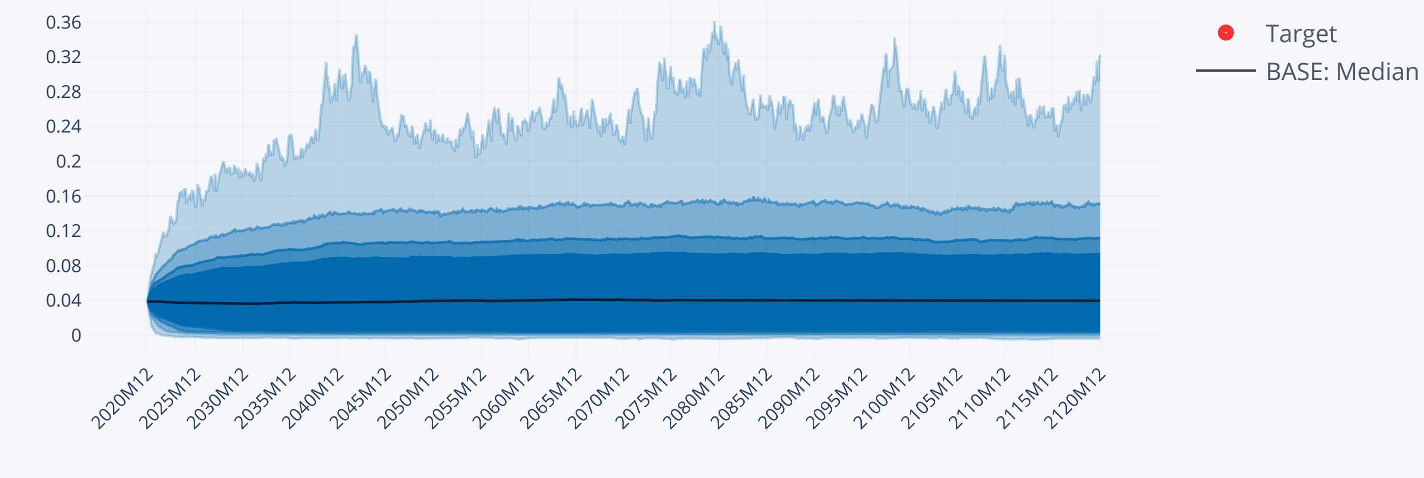
Simulation Summary

	BASE: 2021M12	BASE: 2050M12
mean	0.0390	0.0432
std	0.0133	0.0336
min	0.0015	-0.0047
1%	0.0105	-0.0007
5%	0.0179	0.0017
10%	0.0224	0.0034
50%	0.0385	0.0377
90%	0.0564	0.0898
95%	0.0614	0.1057
99%	0.0724	0.1424
max	0.0938	0.2359

Cross Sectional Volatility Over Time : BASE



Simulated Data in Percentiles : US Treasury 5 Year Yield - Coupon

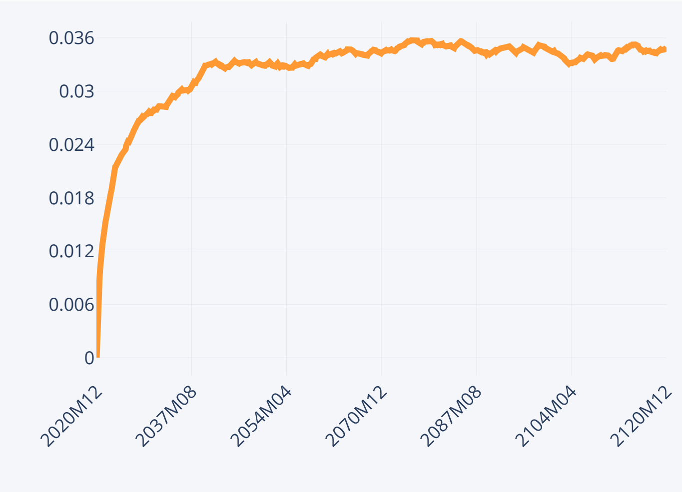


Simulated Data: There are 1200 Time Periods. Percentiles, Mean and Median are calculated across 10000 PATHS.
Percentiles Plotted : Min, 1%, 5%, 10%, 50%, 90%, 95%, 99%, Max
The distributions shown are across the paths for a given time period.

Simulation Summary

	BASE: 2021M12	BASE: 2050M12
mean	0.0392	0.0446
std	0.0127	0.0331
min	0.0019	-0.0038
1%	0.0122	0.0001
5%	0.0193	0.0023
10%	0.0235	0.0039
50%	0.0388	0.0393
90%	0.0559	0.0901
95%	0.0607	0.1060
99%	0.0711	0.1413
max	0.0914	0.2326

Cross Sectional Volatility Over Time : BASE



US Treasury 6 Year Yield - Coupon
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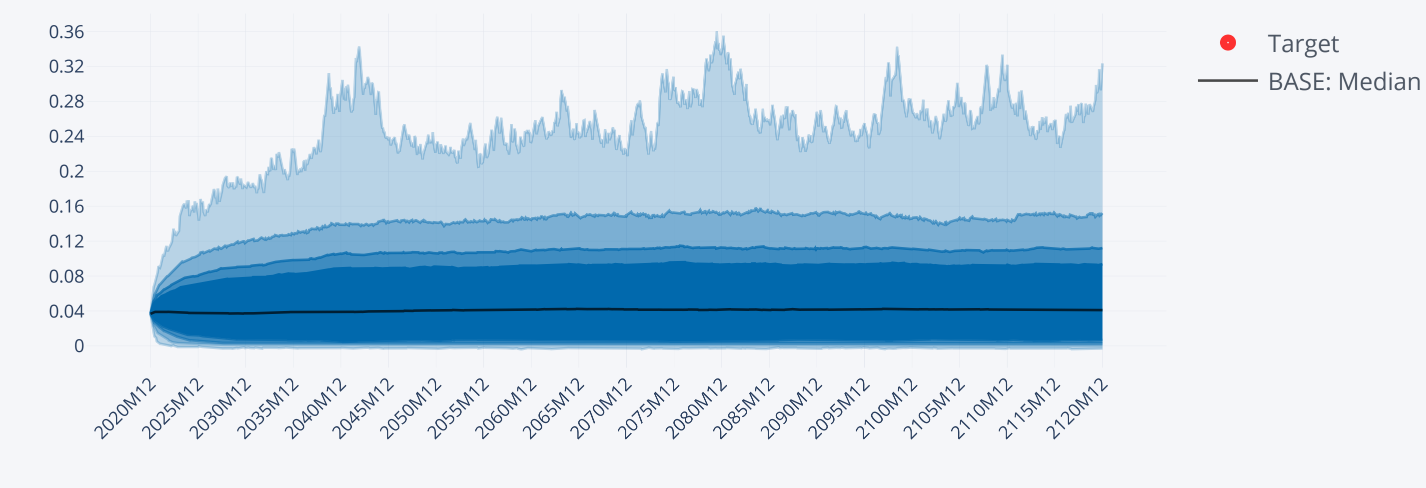
Simulated Data in Percentiles : US Treasury 6 Year Yield - Coupon

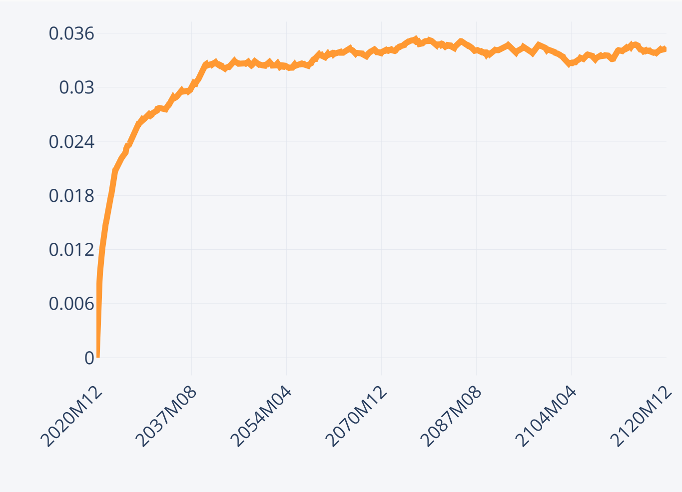


Simulated Data: There are 1200 Time Periods. Percentiles, Mean and Median are calculated across 10000 PATHS.
Percentiles Plotted : Min, 1%, 5%, 10%, 50%, 90%, 95%, 99%, Max
The distributions shown are across the paths for a given time period.

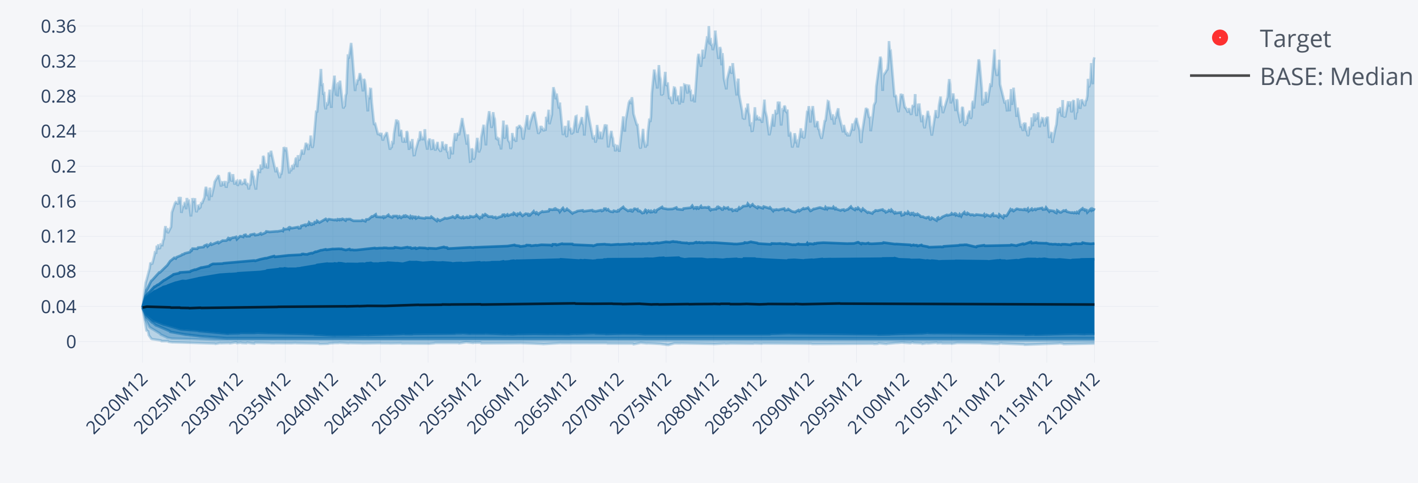
Simulation Summary

	BASE: 2021M12	BASE: 2050M12
mean	0.0397	0.0457
std	0.0122	0.0326
min	0.0024	-0.0031
1%	0.0139	0.0007
5%	0.0205	0.0028
10%	0.0246	0.0060
50%	0.0393	0.0407
90%	0.0557	0.0906
95%	0.0603	0.1058
99%	0.0704	0.1413
max	0.0896	0.2298

Cross Sectional Volatility Over Time : BASE



Simulated Data in Percentiles : US Treasury 7 Year Yield - Coupon

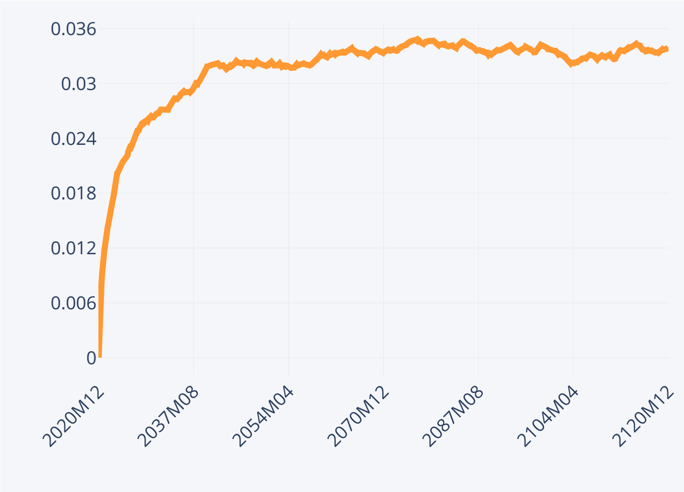


Simulated Data: There are 1200 Time Periods. Percentiles, Mean and Median are calculated across 10000 PATHS.
Percentiles Plotted : Min, 1%, 5%, 10%, 50%, 90%, 95%, 99%, Max
The distributions shown are across the paths for a given time period.

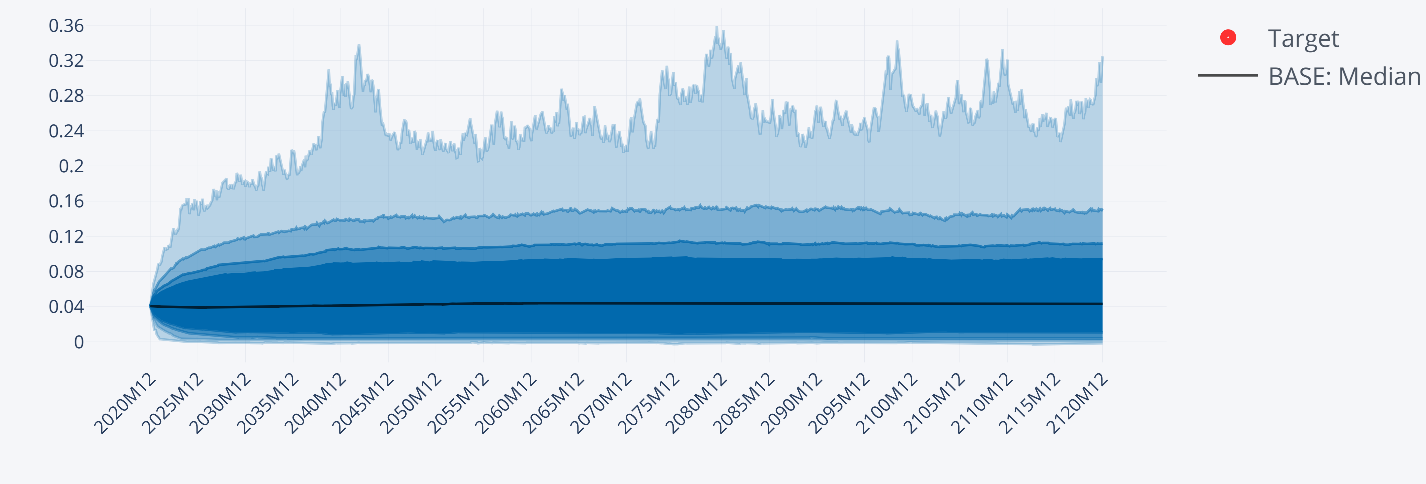
Simulation Summary

	BASE: 2021M12	BASE: 2050M12
mean	0.0402	0.0468
std	0.0118	0.0322
min	0.0028	-0.0024
1%	0.0153	0.0013
5%	0.0217	0.0033
10%	0.0256	0.0082
50%	0.0397	0.0419
90%	0.0556	0.0910
95%	0.0600	0.1059
99%	0.0698	0.1409
max	0.0881	0.2275

Cross Sectional Volatility Over Time : BASE



Simulated Data in Percentiles : US Treasury 8 Year Yield - Coupon

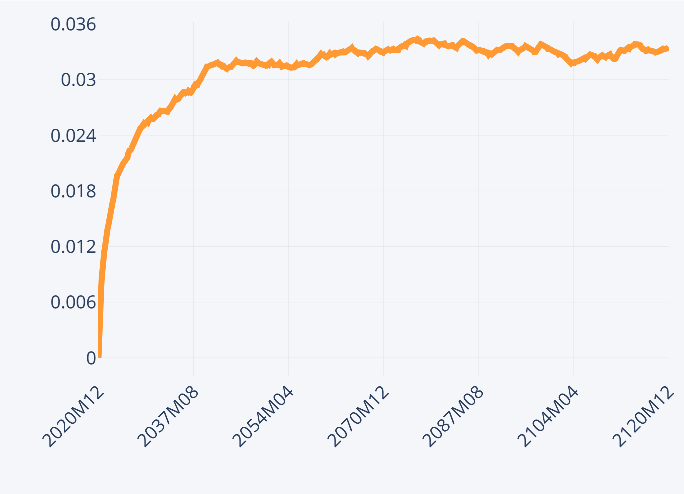


Simulated Data: There are 1200 Time Periods. Percentiles, Mean and Median are calculated across 10000 PATHS.
Percentiles Plotted : Min, 1%, 5%, 10%, 50%, 90%, 95%, 99%, Max
The distributions shown are across the paths for a given time period.

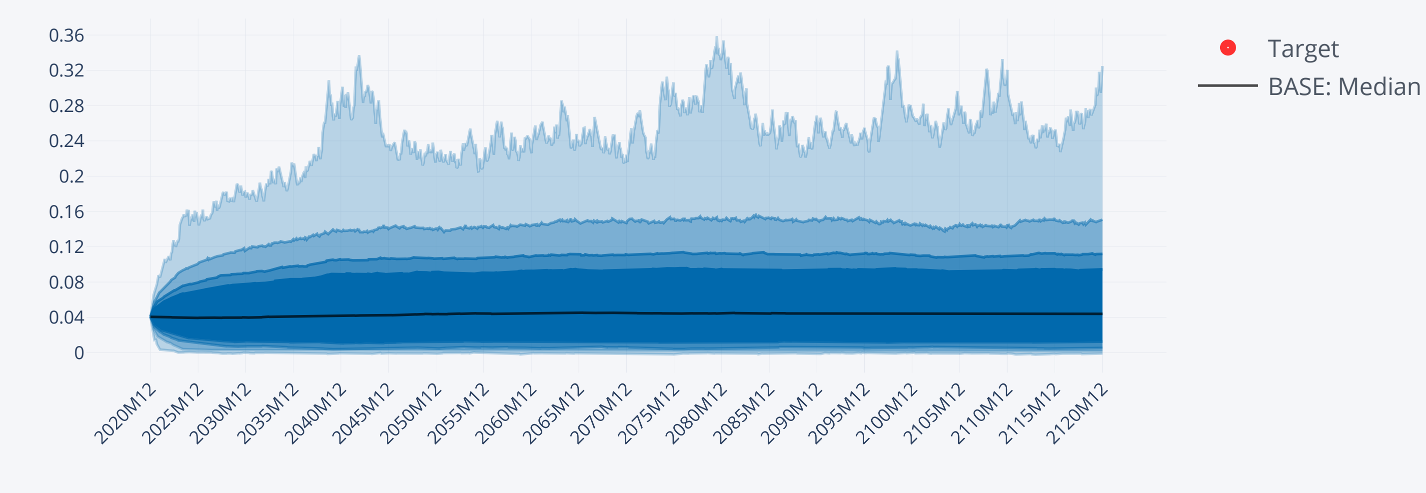
Simulation Summary

	BASE: 2021M12	BASE: 2050M12
mean	0.0404	0.0477
std	0.0114	0.0318
min	0.0031	-0.0018
1%	0.0164	0.0018
5%	0.0227	0.0038
10%	0.0263	0.0100
50%	0.0400	0.0429
90%	0.0554	0.0912
95%	0.0597	0.1061
99%	0.0692	0.1406
max	0.0867	0.2254

Cross Sectional Volatility Over Time : BASE



Simulated Data in Percentiles : US Treasury 9 Year Yield - Coupon

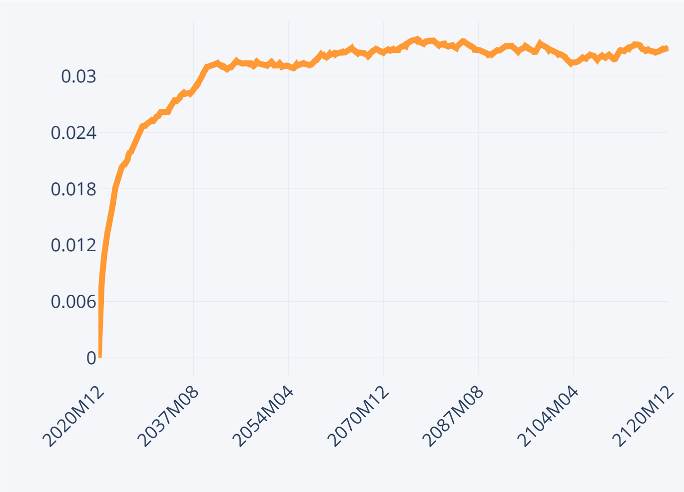


Simulated Data: There are 1200 Time Periods. Percentiles, Mean and Median are calculated across 10000 PATHS.
Percentiles Plotted : Min, 1%, 5%, 10%, 50%, 90%, 95%, 99%, Max
The distributions shown are across the paths for a given time period.

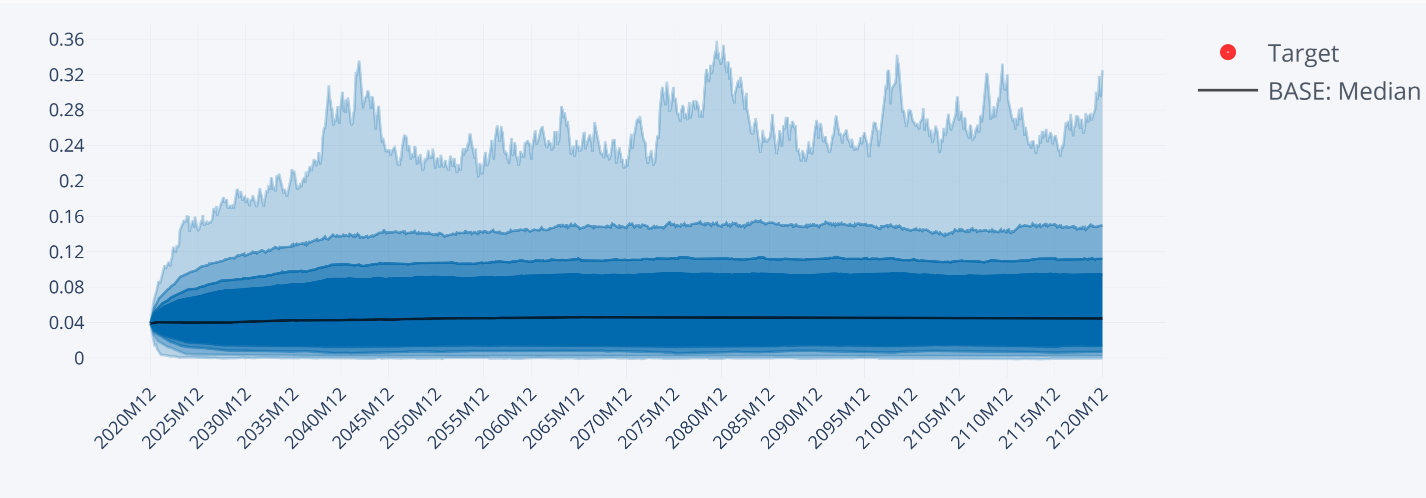
Simulation Summary

	BASE: 2021M12	BASE: 2050M12
mean	0.0406	0.0485
std	0.0111	0.0313
min	0.0034	-0.0012
1%	0.0173	0.0022
5%	0.0233	0.0047
10%	0.0269	0.0116
50%	0.0402	0.0438
90%	0.0552	0.0916
95%	0.0594	0.1063
99%	0.0687	0.1407
max	0.0853	0.2236

Cross Sectional Volatility Over Time : BASE



Simulated Data in Percentiles : US Treasury 10 Year Yield - Coupon

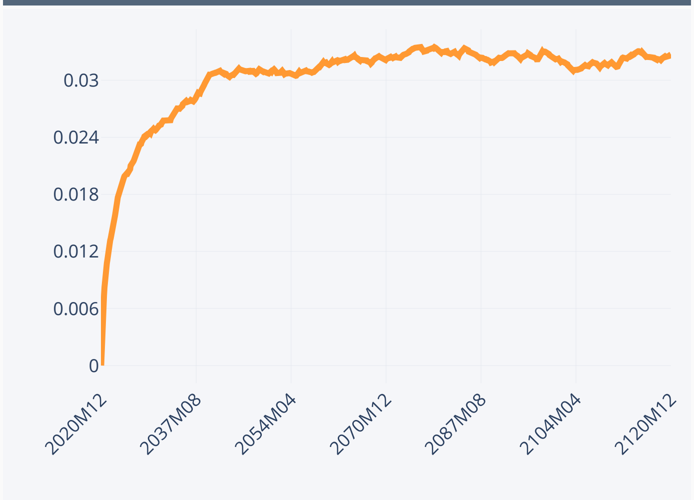


Simulated Data: There are 1200 Time Periods. Percentiles, Mean and Median are calculated across 10000 PATHS.
Percentiles Plotted : Min, 1%, 5%, 10%, 50%, 90%, 95%, 99%, Max
The distributions shown are across the paths for a given time period.

Simulation Summary

	BASE: 2021M12	BASE: 2050M12
mean	0.0409	0.0492
std	0.0108	0.0310
min	0.0036	-0.0007
1%	0.0181	0.0026
5%	0.0241	0.0063
10%	0.0275	0.0131
50%	0.0404	0.0446
90%	0.0551	0.0916
95%	0.0593	0.1062
99%	0.0684	0.1402
max	0.0842	0.2221

Cross Sectional Volatility Over Time : BASE



US Treasury 11 Year Yield - Coupon
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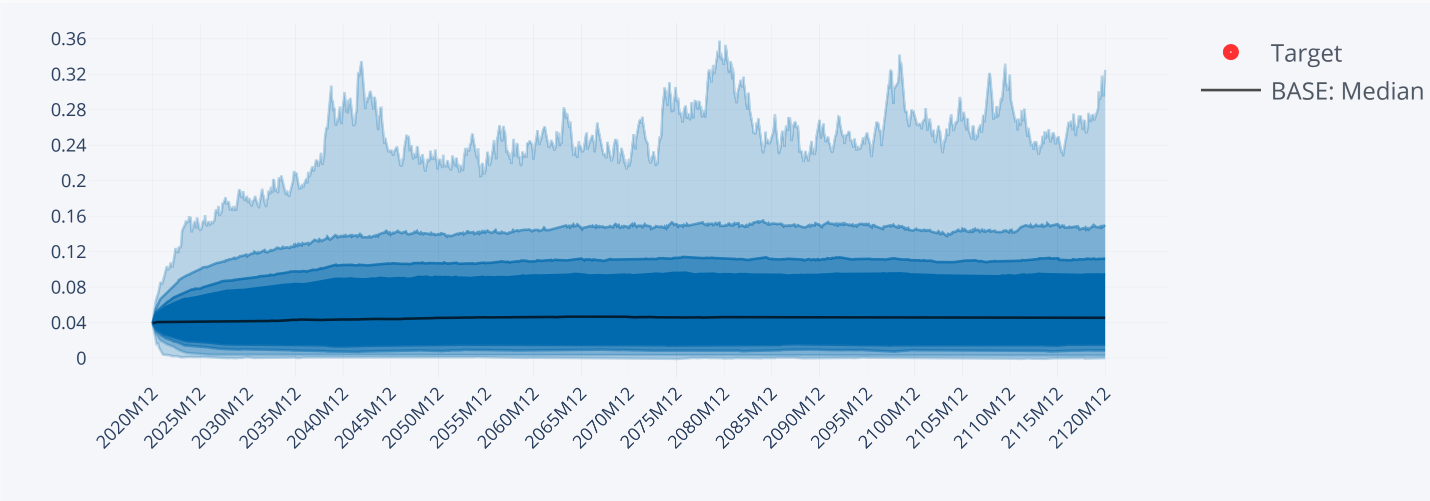
Simulated Data in Percentiles : US Treasury 11 Year Yield - Coupon

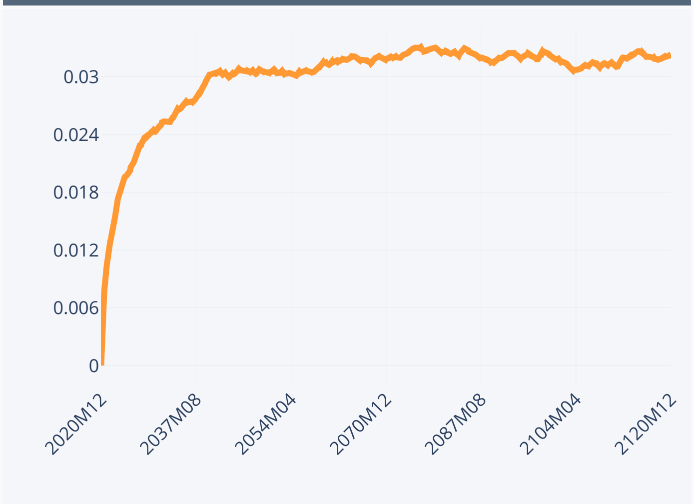


Simulated Data: There are 1200 Time Periods. Percentiles, Mean and Median are calculated across 10000 PATHS.
Percentiles Plotted : Min, 1%, 5%, 10%, 50%, 90%, 95%, 99%, Max
The distributions shown are across the paths for a given time period.

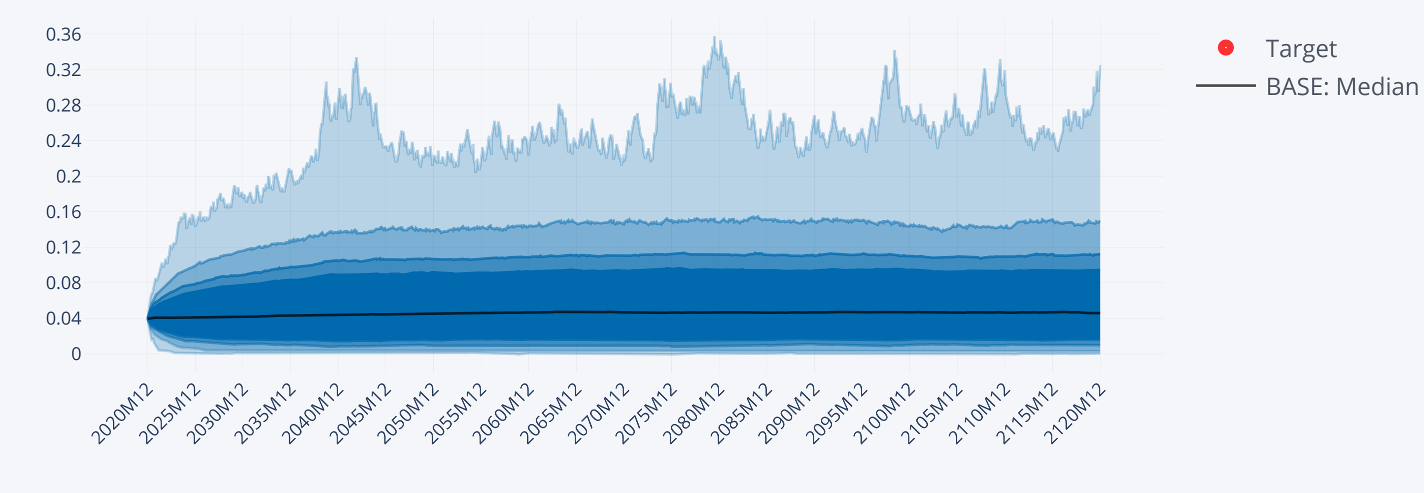
Simulation Summary

	BASE: 2021M12	BASE: 2050M12
mean	0.0411	0.0498
std	0.0105	0.0306
min	0.0039	-0.0002
1%	0.0189	0.0030
5%	0.0248	0.0077
10%	0.0281	0.0144
50%	0.0407	0.0453
90%	0.0550	0.0918
95%	0.0591	0.1062
99%	0.0679	0.1397
max	0.0832	0.2207

Cross Sectional Volatility Over Time : BASE



Simulated Data in Percentiles : US Treasury 12 Year Yield - Coupon

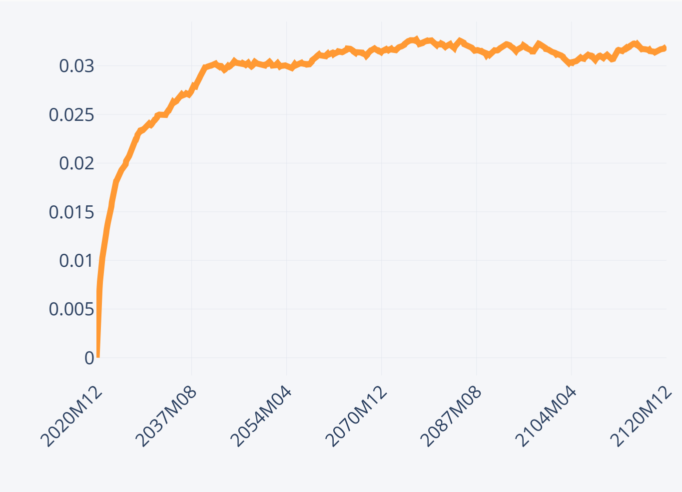


Simulated Data: There are 1200 Time Periods. Percentiles, Mean and Median are calculated across 10000 PATHS.
Percentiles Plotted : Min, 1%, 5%, 10%, 50%, 90%, 95%, 99%, Max
The distributions shown are across the paths for a given time period.

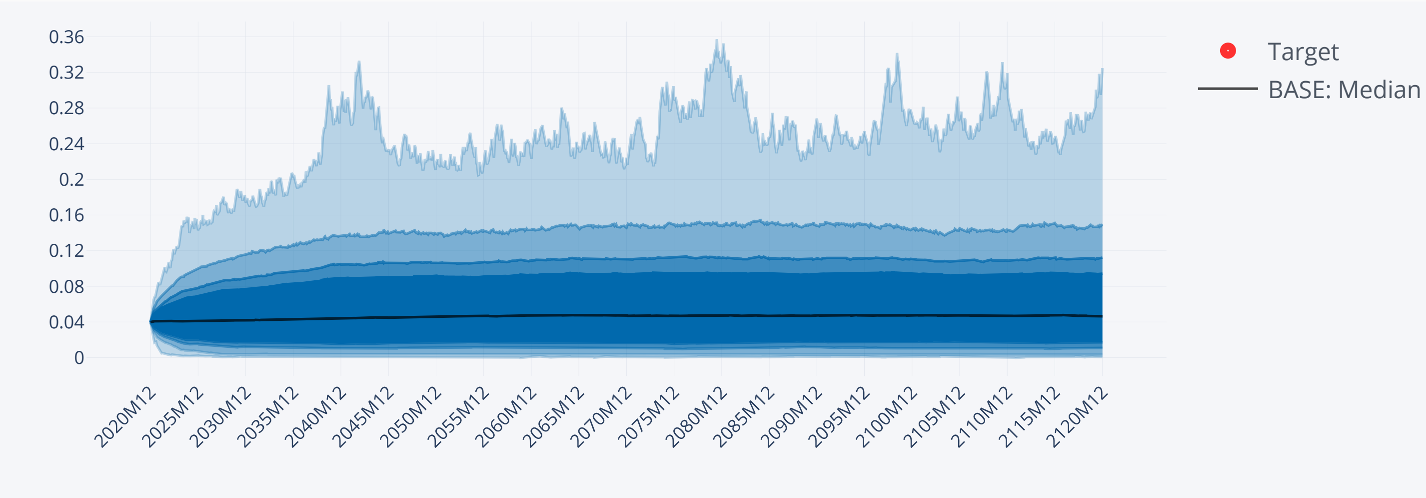
Simulation Summary

	BASE: 2021M12	BASE: 2050M12
mean	0.0414	0.0503
std	0.0103	0.0302
min	0.0047	0.0002
1%	0.0196	0.0033
5%	0.0254	0.0090
10%	0.0286	0.0155
50%	0.0409	0.0457
90%	0.0549	0.0918
95%	0.0591	0.1063
99%	0.0676	0.1393
max	0.0823	0.2195

Cross Sectional Volatility Over Time : BASE



Simulated Data in Percentiles : US Treasury 13 Year Yield - Coupon

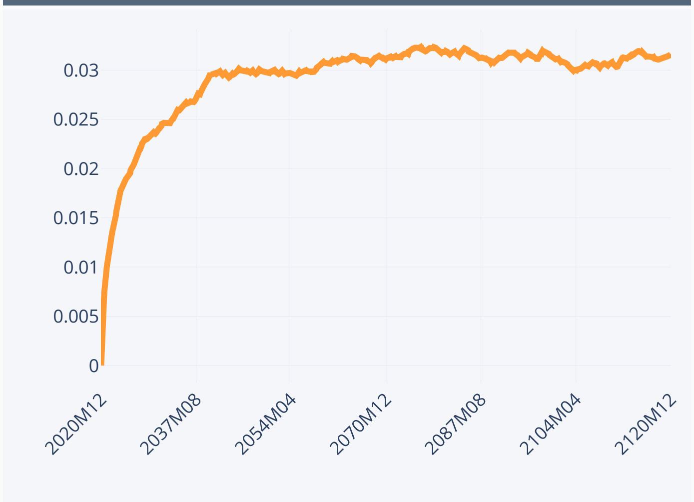


Simulated Data: There are 1200 Time Periods. Percentiles, Mean and Median are calculated across 10000 PATHS.
Percentiles Plotted : Min, 1%, 5%, 10%, 50%, 90%, 95%, 99%, Max
The distributions shown are across the paths for a given time period.

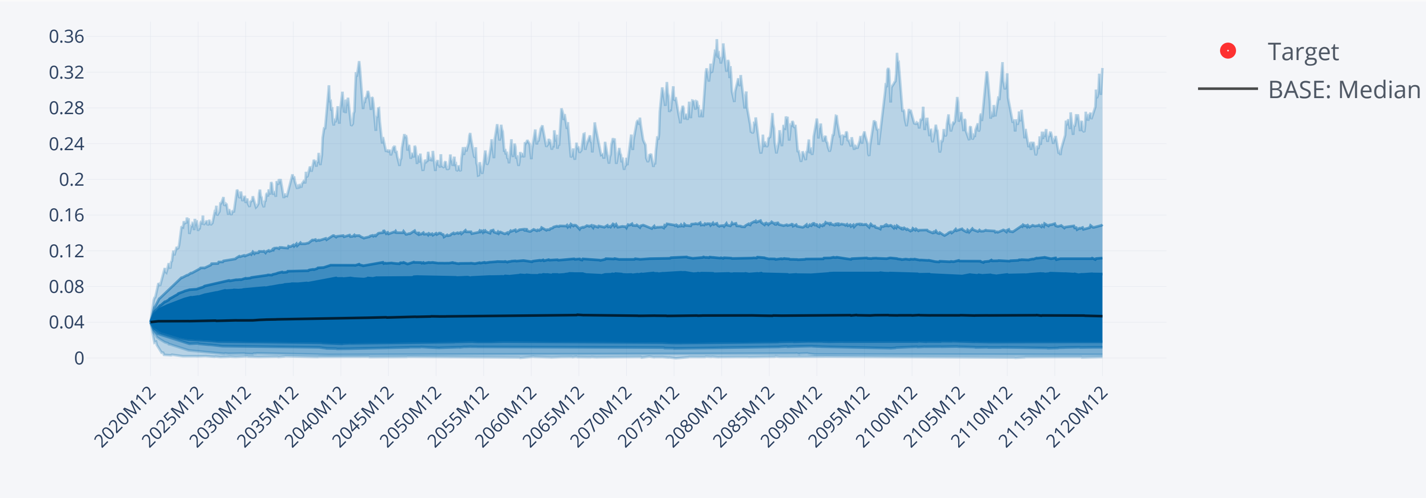
Simulation Summary

	BASE: 2021M12	BASE: 2050M12
mean	0.0415	0.0508
std	0.0101	0.0299
min	0.0058	0.0006
1%	0.0203	0.0036
5%	0.0259	0.0102
10%	0.0291	0.0165
50%	0.0411	0.0462
90%	0.0548	0.0918
95%	0.0589	0.1063
99%	0.0673	0.1395
max	0.0815	0.2184

Cross Sectional Volatility Over Time : BASE



Simulated Data in Percentiles : US Treasury 14 Year Yield - Coupon

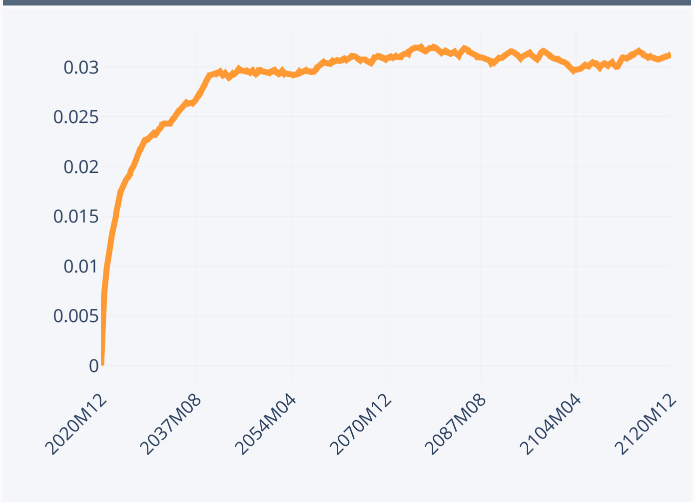


Simulated Data: There are 1200 Time Periods. Percentiles, Mean and Median are calculated across 10000 PATHS.
Percentiles Plotted : Min, 1%, 5%, 10%, 50%, 90%, 95%, 99%, Max
The distributions shown are across the paths for a given time period.

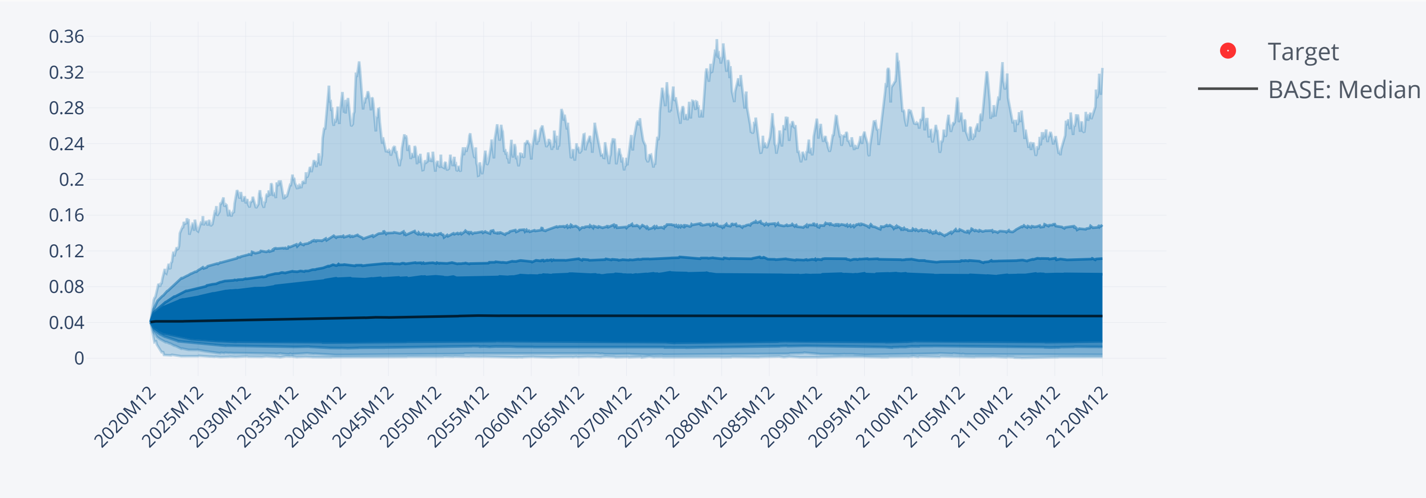
Simulation Summary

	BASE: 2021M12	BASE: 2050M12
mean	0.0417	0.0512
std	0.0099	0.0296
min	0.0068	0.0009
1%	0.0208	0.0038
5%	0.0264	0.0112
10%	0.0295	0.0174
50%	0.0412	0.0467
90%	0.0547	0.0918
95%	0.0587	0.1062
99%	0.0670	0.1396
max	0.0808	0.2174

Cross Sectional Volatility Over Time : BASE



Simulated Data in Percentiles : US Treasury 15 Year Yield - Coupon

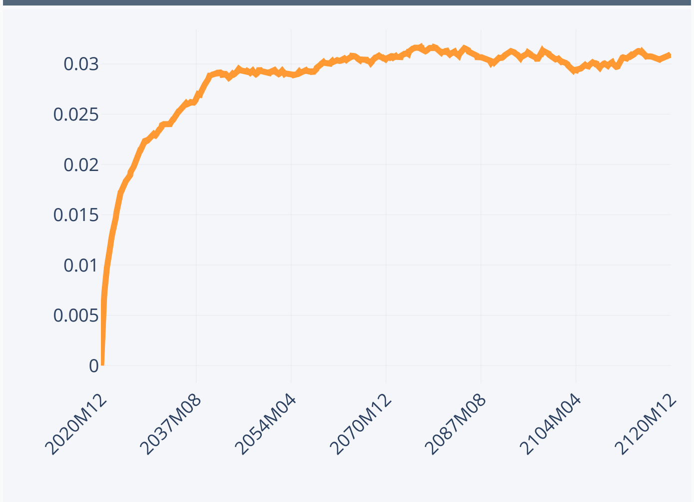


Simulated Data: There are 1200 Time Periods. Percentiles, Mean and Median are calculated across 10000 PATHS.
Percentiles Plotted : Min, 1%, 5%, 10%, 50%, 90%, 95%, 99%, Max
The distributions shown are across the paths for a given time period.

Simulation Summary

	BASE: 2021M12	BASE: 2050M12
mean	0.0419	0.0515
std	0.0097	0.0293
min	0.0077	0.0012
1%	0.0213	0.0044
5%	0.0268	0.0122
10%	0.0299	0.0182
50%	0.0413	0.0470
90%	0.0546	0.0916
95%	0.0586	0.1059
99%	0.0668	0.1391
max	0.0801	0.2166

Cross Sectional Volatility Over Time : BASE



US Treasury 16 Year Yield - Coupon
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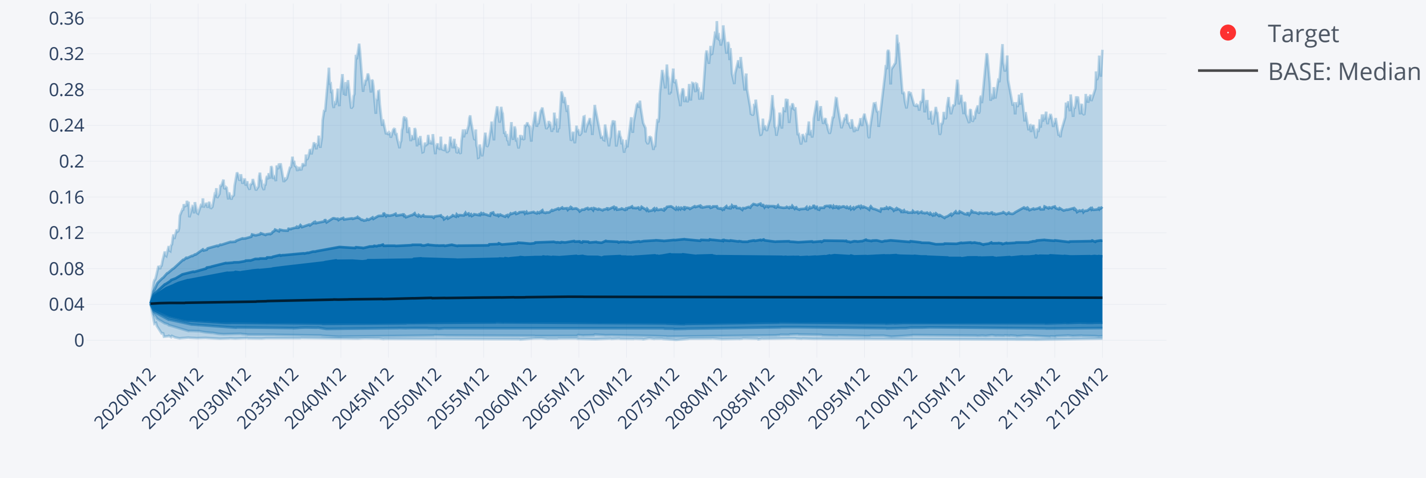
Simulated Data in Percentiles : US Treasury 16 Year Yield - Coupon

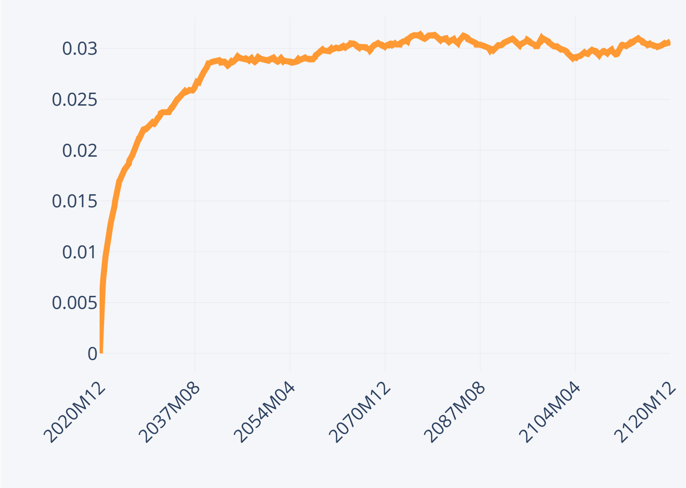


Simulated Data: There are 1200 Time Periods. Percentiles, Mean and Median are calculated across 10000 PATHS.
Percentiles Plotted : Min, 1%, 5%, 10%, 50%, 90%, 95%, 99%, Max
The distributions shown are across the paths for a given time period.

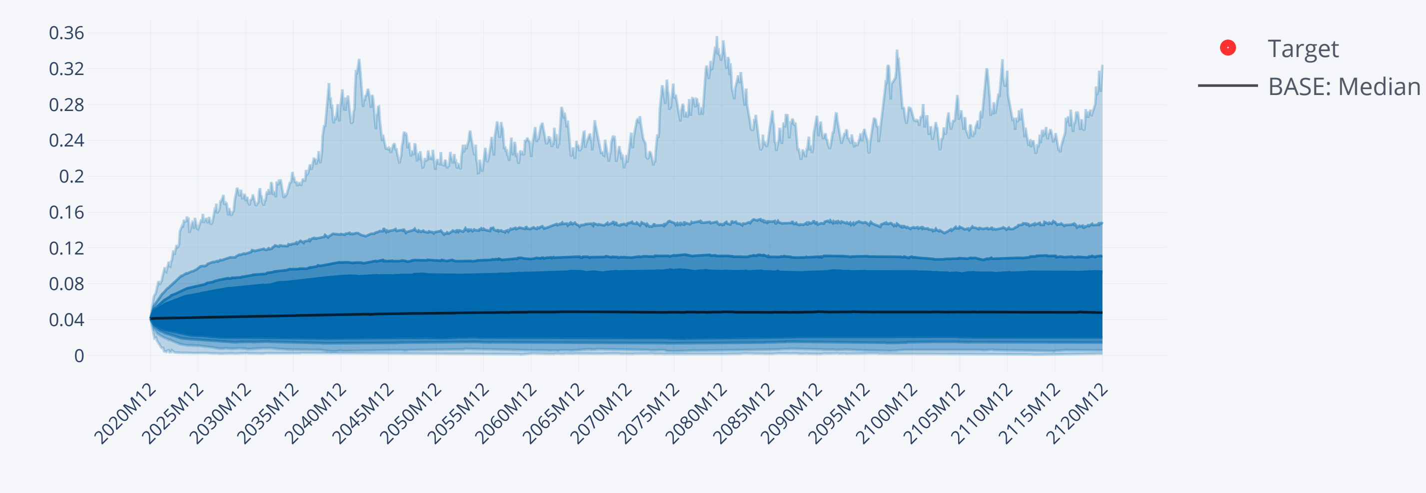
Simulation Summary

	BASE: 2021M12	BASE: 2050M12
mean	0.0420	0.0518
std	0.0096	0.0290
min	0.0086	0.0015
1%	0.0219	0.0055
5%	0.0272	0.0130
10%	0.0302	0.0189
50%	0.0414	0.0473
90%	0.0545	0.0916
95%	0.0585	0.1058
99%	0.0664	0.1385
max	0.0795	0.2158

Cross Sectional Volatility Over Time : BASE



Simulated Data in Percentiles : US Treasury 17 Year Yield - Coupon

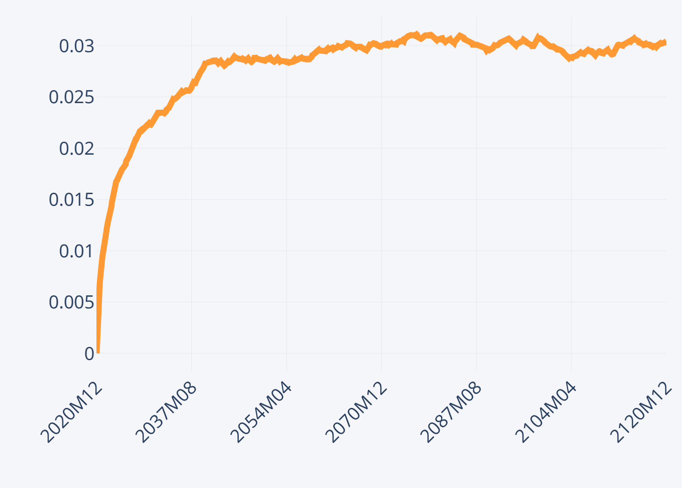


Simulated Data: There are 1200 Time Periods. Percentiles, Mean and Median are calculated across 10000 PATHS.
Percentiles Plotted : Min, 1%, 5%, 10%, 50%, 90%, 95%, 99%, Max
The distributions shown are across the paths for a given time period.

Simulation Summary

	BASE: 2021M12	BASE: 2050M12
mean	0.0421	0.0520
std	0.0094	0.0287
min	0.0093	0.0018
1%	0.0224	0.0064
5%	0.0276	0.0137
10%	0.0305	0.0196
50%	0.0415	0.0475
90%	0.0544	0.0914
95%	0.0583	0.1056
99%	0.0663	0.1381
max	0.0789	0.2151

Cross Sectional Volatility Over Time : BASE



US Treasury 18 Year Yield - Coupon

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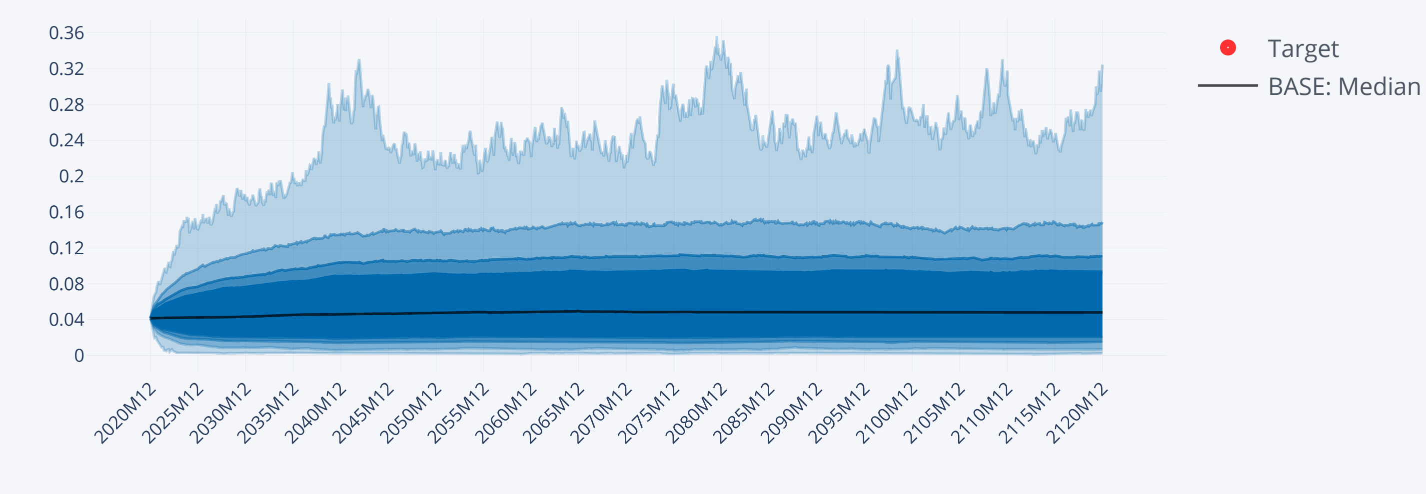
Simulated Data in Percentiles : US Treasury 18 Year Yield - Coupon

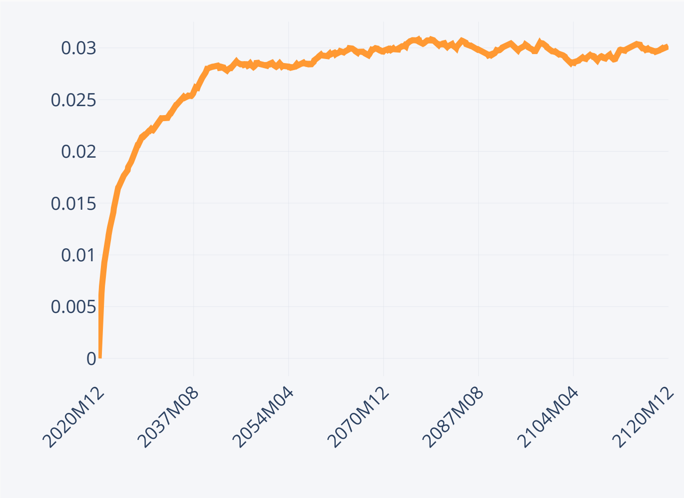


Simulated Data: There are 1200 Time Periods. Percentiles, Mean and Median are calculated across 10000 PATHS.
Percentiles Plotted : Min, 1%, 5%, 10%, 50%, 90%, 95%, 99%, Max
The distributions shown are across the paths for a given time period.

Simulation Summary

	BASE: 2021M12	BASE: 2050M12
mean	0.0422	0.0522
std	0.0093	0.0285
min	0.0101	0.0021
1%	0.0228	0.0073
5%	0.0279	0.0144
10%	0.0308	0.0202
50%	0.0417	0.0477
90%	0.0543	0.0913
95%	0.0582	0.1055
99%	0.0660	0.1377
max	0.0787	0.2144

Cross Sectional Volatility Over Time : BASE



US Treasury 19 Year Yield - Coupon
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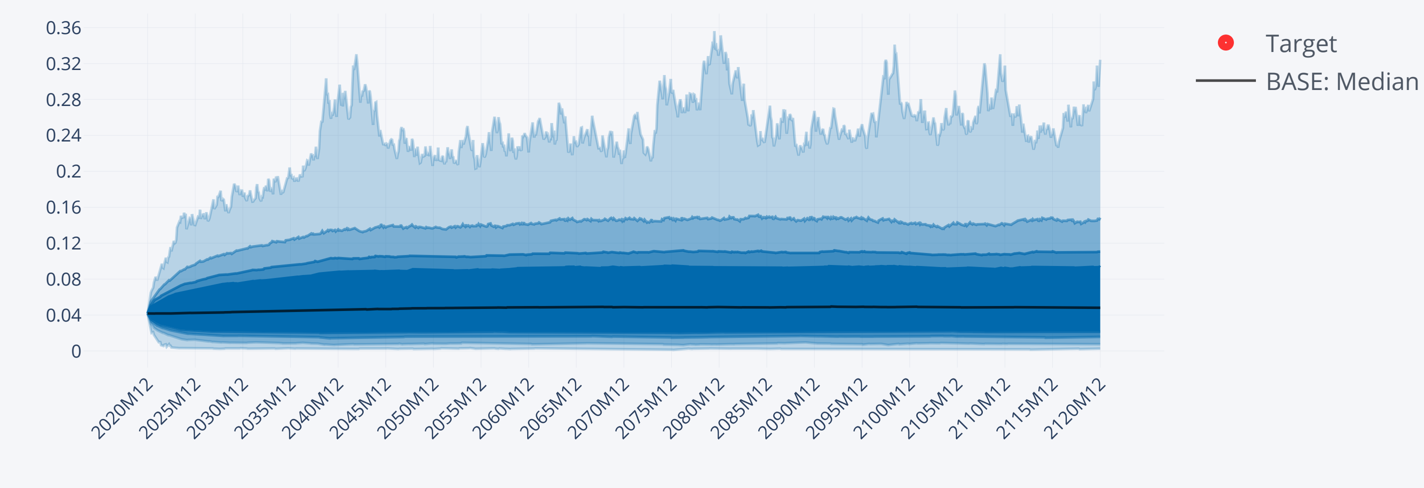
Simulated Data in Percentiles : US Treasury 19 Year Yield - Coupon

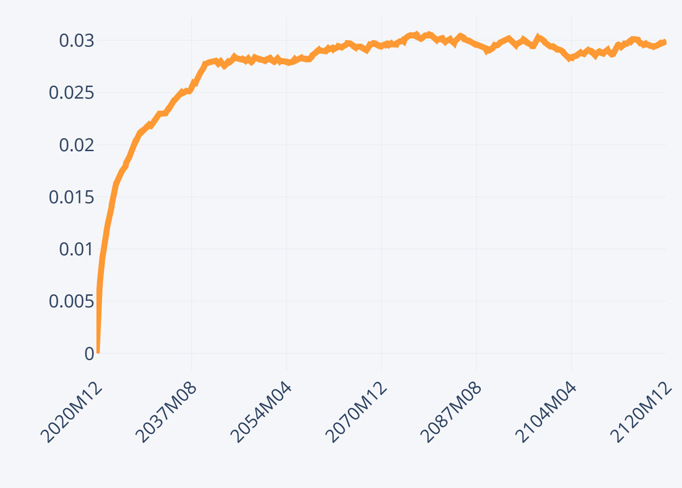


Simulated Data: There are 1200 Time Periods. Percentiles, Mean and Median are calculated across 10000 PATHS.
Percentiles Plotted : Min, 1%, 5%, 10%, 50%, 90%, 95%, 99%, Max
The distributions shown are across the paths for a given time period.

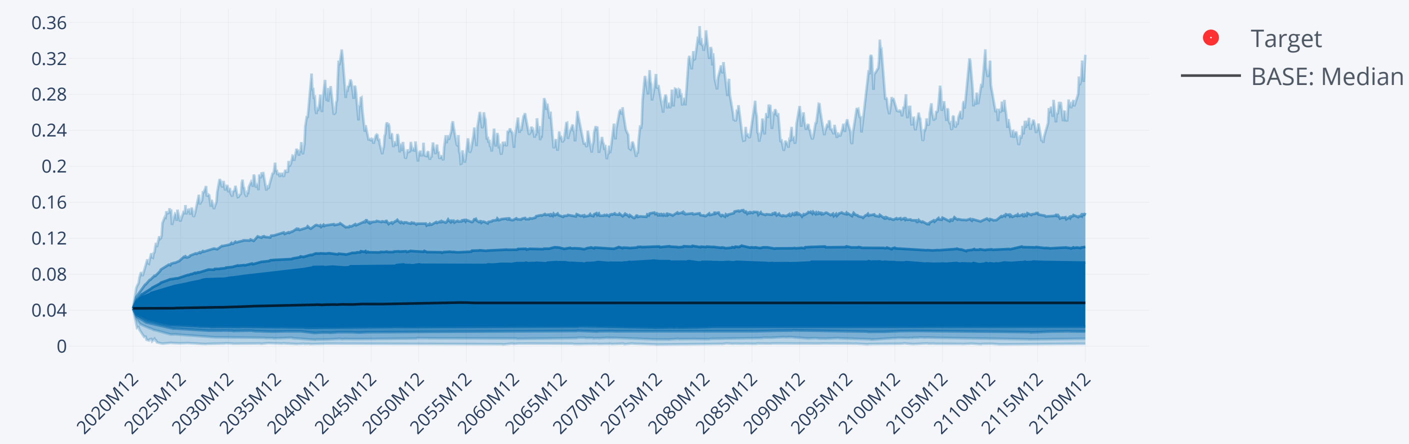
Simulation Summary

	BASE: 2021M12	BASE: 2050M12
mean	0.0423	0.0524
std	0.0092	0.0282
min	0.0107	0.0023
1%	0.0232	0.0081
5%	0.0282	0.0151
10%	0.0310	0.0207
50%	0.0418	0.0479
90%	0.0542	0.0912
95%	0.0580	0.1053
99%	0.0658	0.1372
max	0.0784	0.2139

Cross Sectional Volatility Over Time : BASE



Simulated Data in Percentiles : US Treasury 20 Year Yield - Coupon

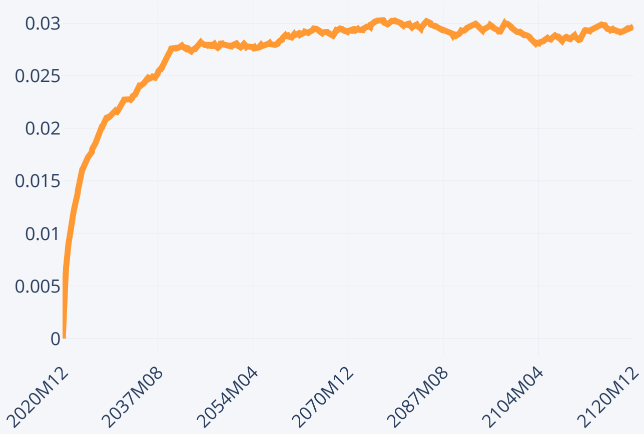


Simulated Data: There are 1200 Time Periods. Percentiles, Mean and Median are calculated across 10000 PATHS.
Percentiles Plotted : Min, 1%, 5%, 10%, 50%, 90%, 95%, 99%, Max
The distributions shown are across the paths for a given time period.

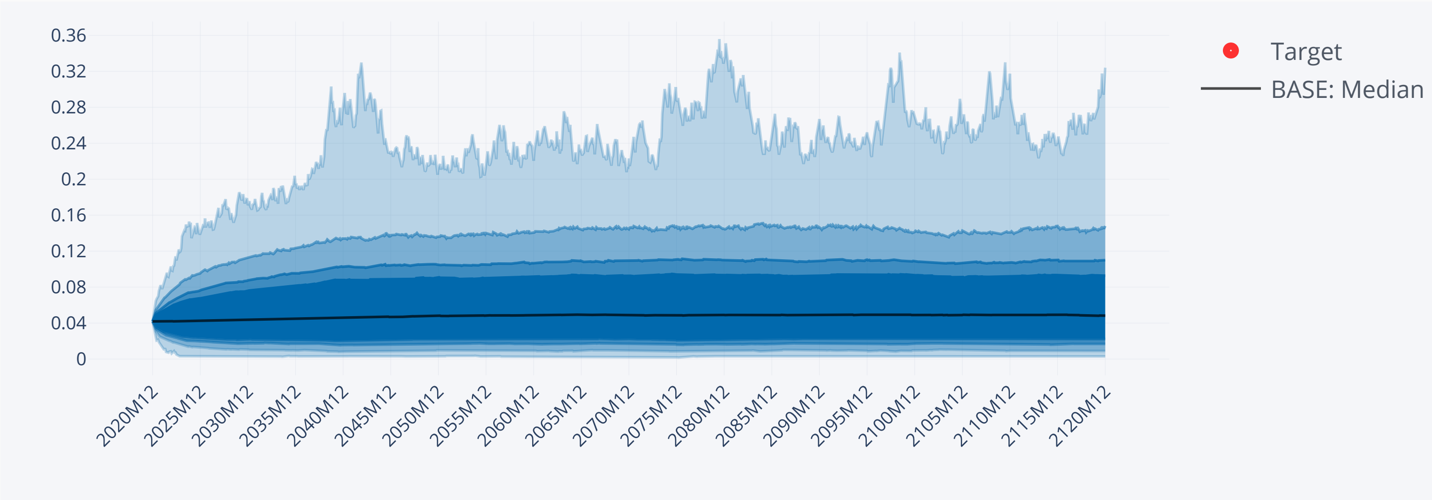
Simulation Summary

	BASE: 2021M12	BASE: 2050M12
mean	0.0423	0.0525
std	0.0090	0.0280
min	0.0113	0.0025
1%	0.0236	0.0089
5%	0.0284	0.0157
10%	0.0312	0.0212
50%	0.0418	0.0480
90%	0.0541	0.0910
95%	0.0579	0.1049
99%	0.0656	0.1369
max	0.0782	0.2133

Cross Sectional Volatility Over Time : BASE



Simulated Data in Percentiles : US Treasury 21 Year Yield - Coupon

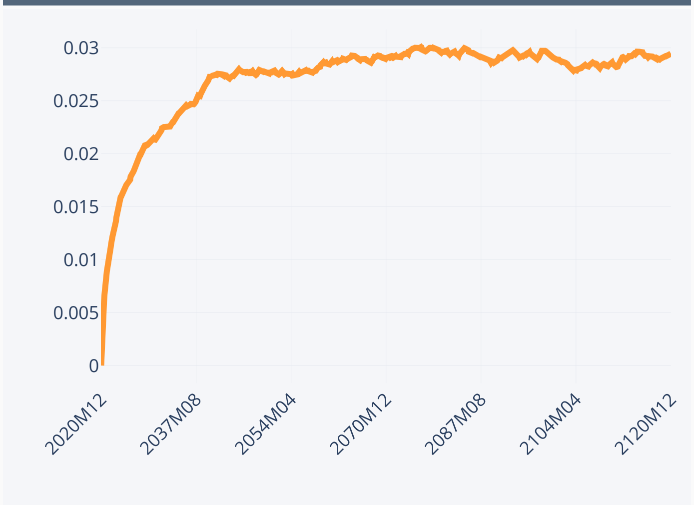


Simulated Data: There are 1200 Time Periods. Percentiles, Mean and Median are calculated across 10000 PATHS.
Percentiles Plotted : Min, 1%, 5%, 10%, 50%, 90%, 95%, 99%, Max
The distributions shown are across the paths for a given time period.

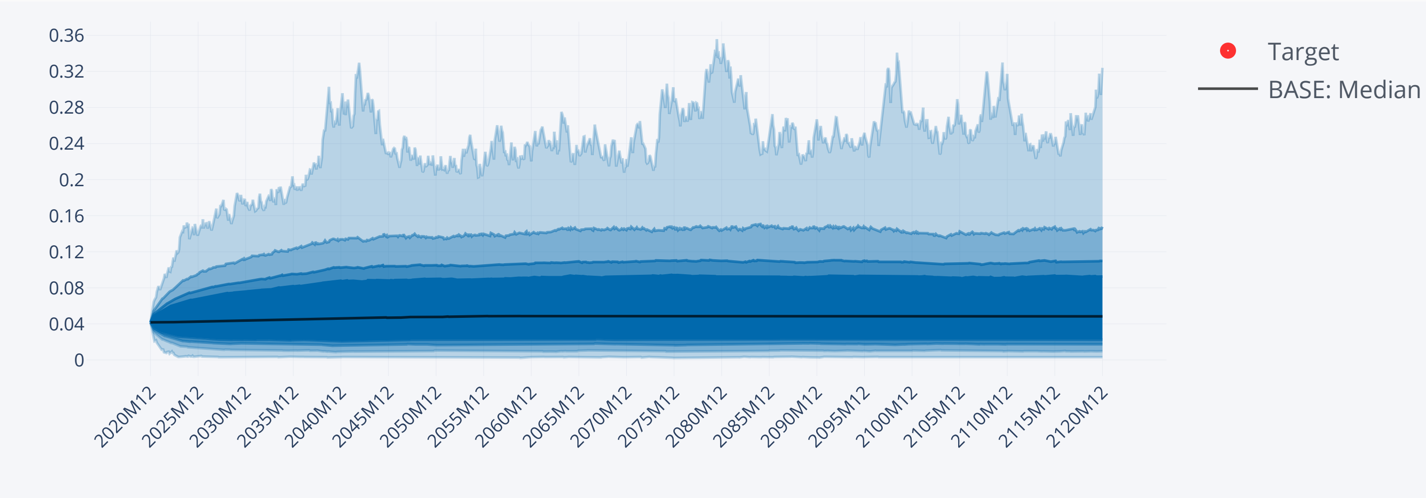
Simulation Summary

	BASE: 2021M12	BASE: 2050M12
mean	0.0423	0.0526
std	0.0089	0.0278
min	0.0119	0.0027
1%	0.0239	0.0095
5%	0.0286	0.0162
10%	0.0314	0.0216
50%	0.0418	0.0481
90%	0.0540	0.0908
95%	0.0577	0.1046
99%	0.0653	0.1365
max	0.0779	0.2128

Cross Sectional Volatility Over Time : BASE



Simulated Data in Percentiles : US Treasury 22 Year Yield - Coupon

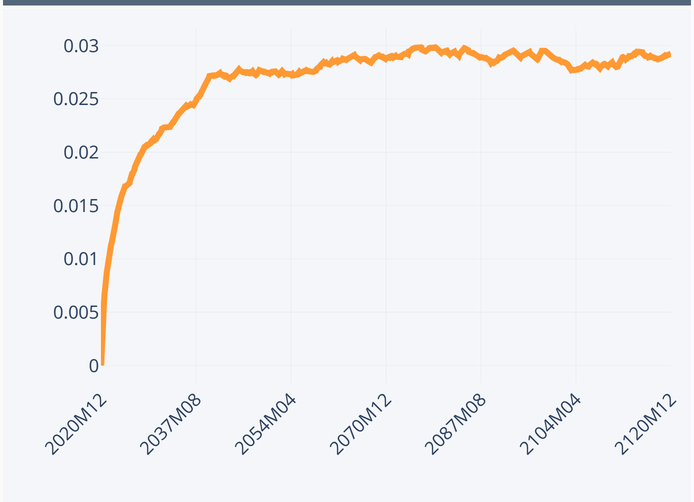


Simulated Data: There are 1200 Time Periods. Percentiles, Mean and Median are calculated across 10000 PATHS.
Percentiles Plotted : Min, 1%, 5%, 10%, 50%, 90%, 95%, 99%, Max
The distributions shown are across the paths for a given time period.

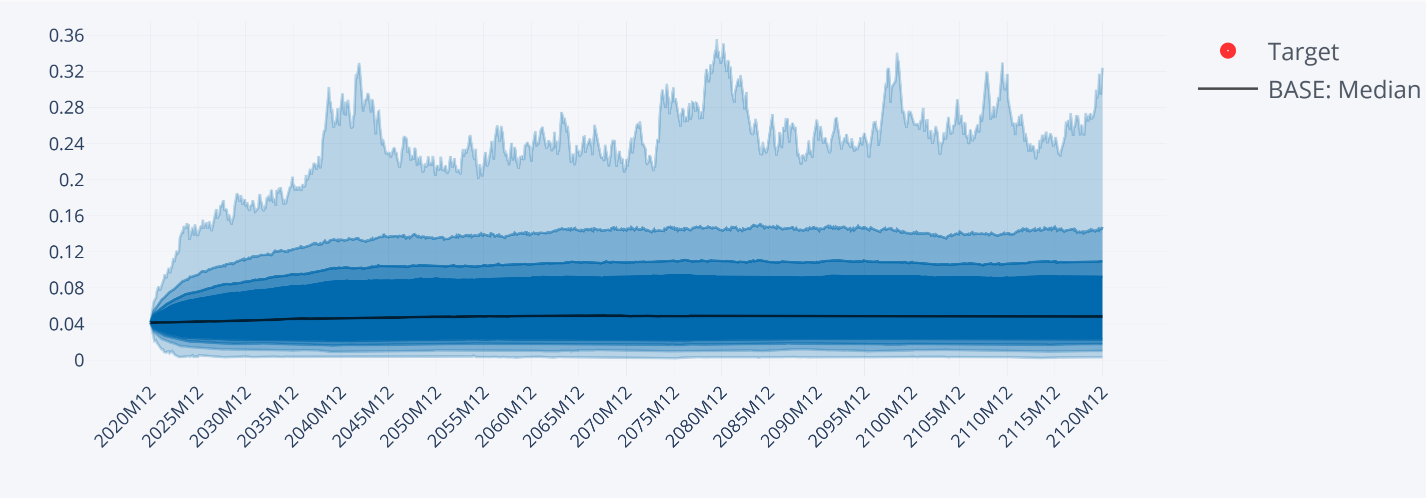
Simulation Summary

	BASE: 2021M12	BASE: 2050M12
mean	0.0423	0.0527
std	0.0088	0.0275
min	0.0124	0.0029
1%	0.0241	0.0101
5%	0.0289	0.0167
10%	0.0315	0.0220
50%	0.0418	0.0482
90%	0.0538	0.0906
95%	0.0576	0.1044
99%	0.0651	0.1361
max	0.0776	0.2124

Cross Sectional Volatility Over Time : BASE



Simulated Data in Percentiles : US Treasury 23 Year Yield - Coupon

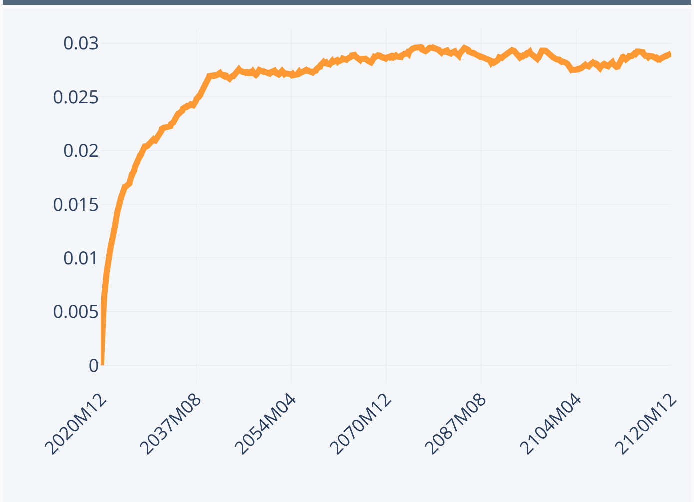


Simulated Data: There are 1200 Time Periods. Percentiles, Mean and Median are calculated across 10000 PATHS.
Percentiles Plotted : Min, 1%, 5%, 10%, 50%, 90%, 95%, 99%, Max
The distributions shown are across the paths for a given time period.

Simulation Summary

	BASE: 2021M12	BASE: 2050M12
mean	0.0423	0.0528
std	0.0087	0.0273
min	0.0129	0.0031
1%	0.0244	0.0107
5%	0.0290	0.0171
10%	0.0317	0.0224
50%	0.0418	0.0482
90%	0.0537	0.0904
95%	0.0574	0.1042
99%	0.0649	0.1359
max	0.0774	0.2120

Cross Sectional Volatility Over Time : BASE



US Treasury 24 Year Yield - Coupon
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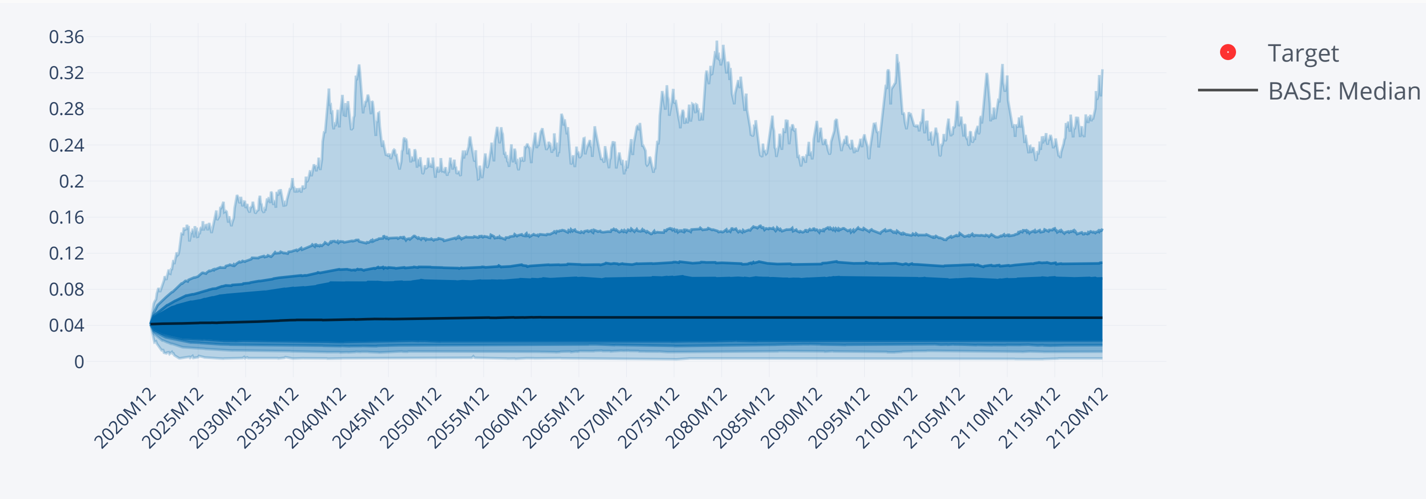
Simulated Data in Percentiles : US Treasury 24 Year Yield - Coupon

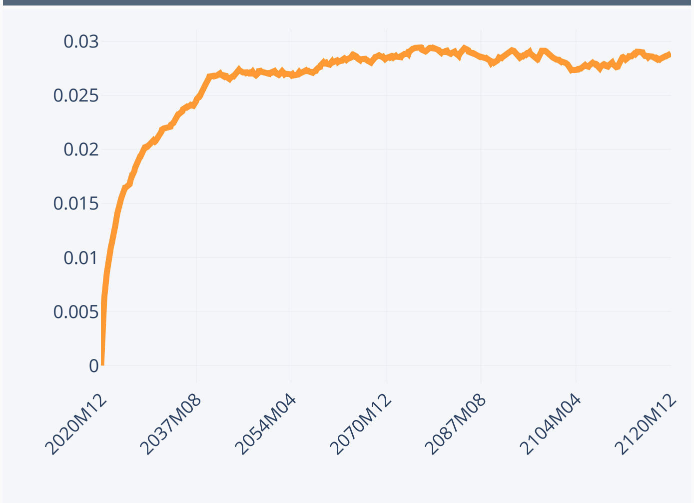


Simulated Data: There are 1200 Time Periods. Percentiles, Mean and Median are calculated across 10000 PATHS.
Percentiles Plotted : Min, 1%, 5%, 10%, 50%, 90%, 95%, 99%, Max
The distributions shown are across the paths for a given time period.

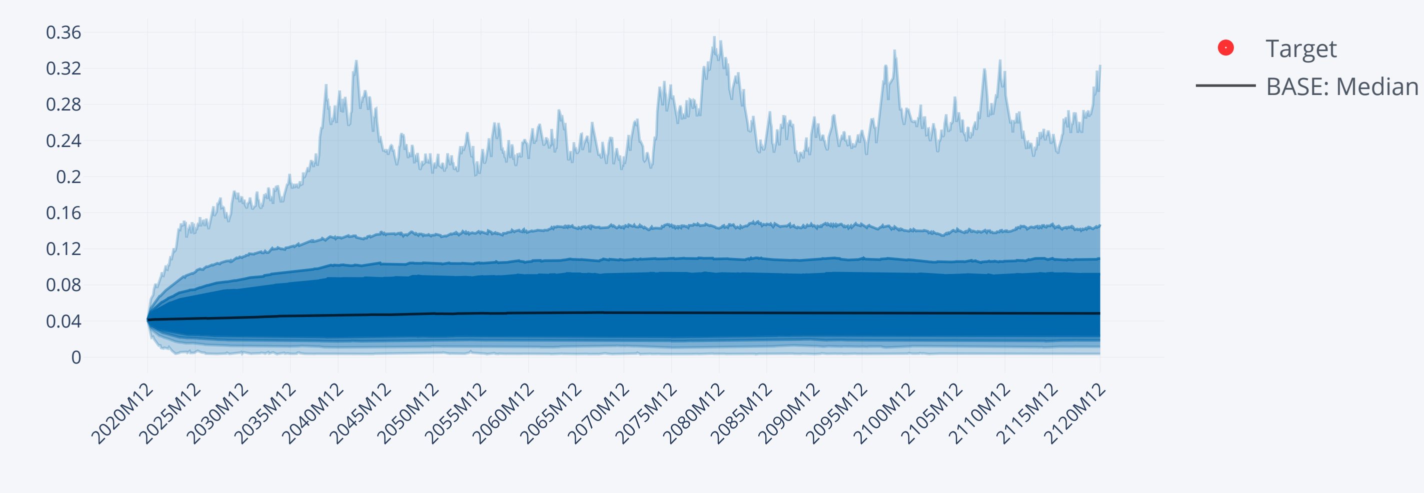
Simulation Summary

	BASE: 2021M12	BASE: 2050M12
mean	0.0423	0.0528
std	0.0086	0.0272
min	0.0133	0.0033
1%	0.0246	0.0112
5%	0.0292	0.0176
10%	0.0318	0.0227
50%	0.0418	0.0482
90%	0.0536	0.0902
95%	0.0572	0.1040
99%	0.0646	0.1355
max	0.0771	0.2116

Cross Sectional Volatility Over Time : BASE



Simulated Data in Percentiles : US Treasury 25 Year Yield - Coupon

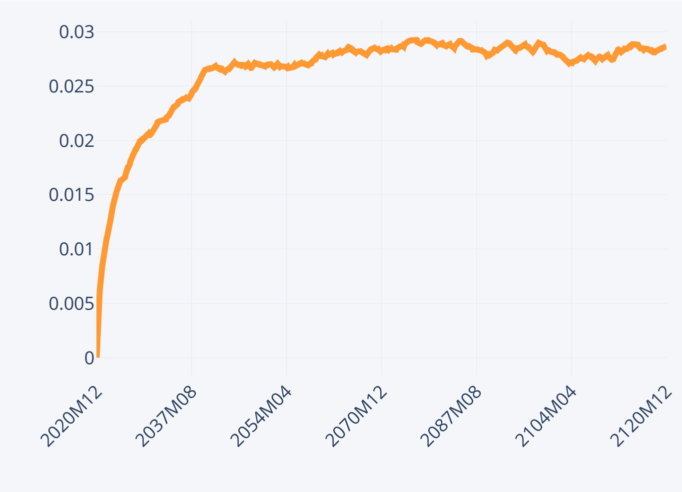


Simulated Data: There are 1200 Time Periods. Percentiles, Mean and Median are calculated across 10000 PATHS.
Percentiles Plotted : Min, 1%, 5%, 10%, 50%, 90%, 95%, 99%, Max
The distributions shown are across the paths for a given time period.

Simulation Summary

	BASE: 2021M12	BASE: 2050M12
mean	0.0423	0.0529
std	0.0085	0.0270
min	0.0138	0.0034
1%	0.0248	0.0117
5%	0.0293	0.0179
10%	0.0319	0.0230
50%	0.0418	0.0483
90%	0.0535	0.0900
95%	0.0570	0.1037
99%	0.0644	0.1351
max	0.0768	0.2112

Cross Sectional Volatility Over Time : BASE



US Treasury 26 Year Yield - Coupon

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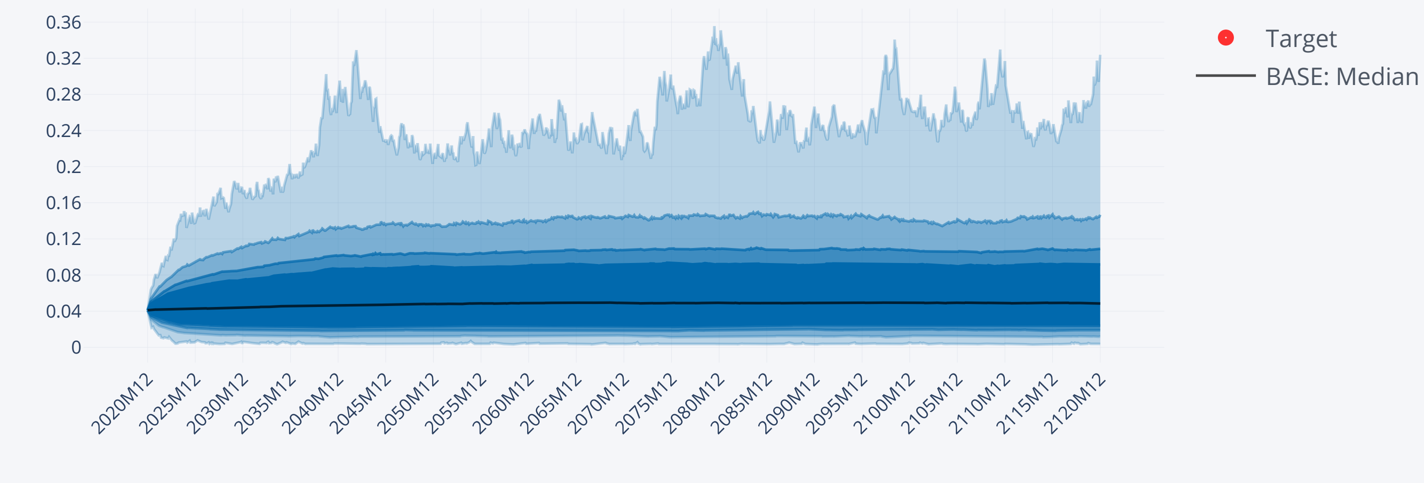
Simulated Data in Percentiles : US Treasury 26 Year Yield - Coupon

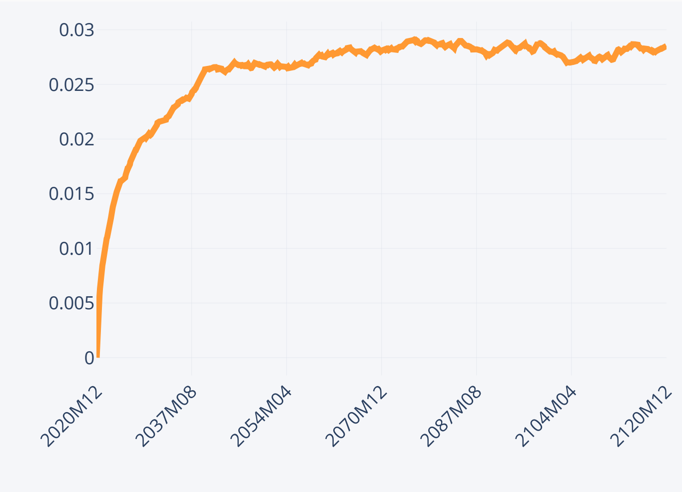


Simulated Data: There are 1200 Time Periods. Percentiles, Mean and Median are calculated across 10000 PATHS.
Percentiles Plotted : Min, 1%, 5%, 10%, 50%, 90%, 95%, 99%, Max
The distributions shown are across the paths for a given time period.

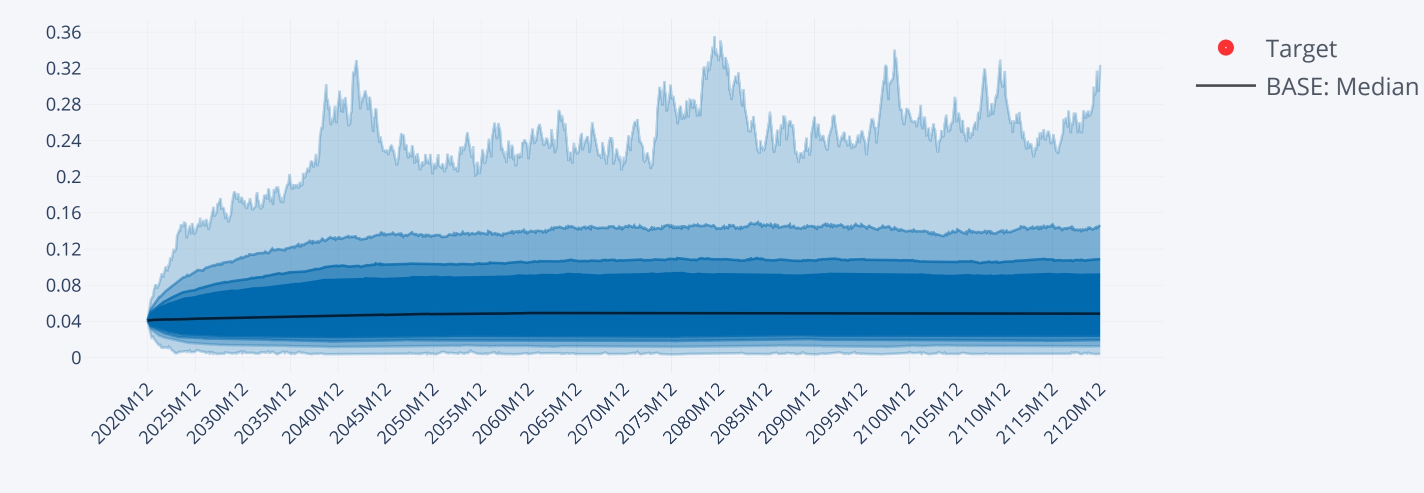
Simulation Summary

	BASE: 2021M12	BASE: 2050M12
mean	0.0423	0.0529
std	0.0084	0.0268
min	0.0141	0.0036
1%	0.0250	0.0122
5%	0.0295	0.0183
10%	0.0320	0.0233
50%	0.0418	0.0483
90%	0.0534	0.0898
95%	0.0569	0.1034
99%	0.0641	0.1347
max	0.0766	0.2109

Cross Sectional Volatility Over Time : BASE



Simulated Data in Percentiles : US Treasury 27 Year Yield - Coupon

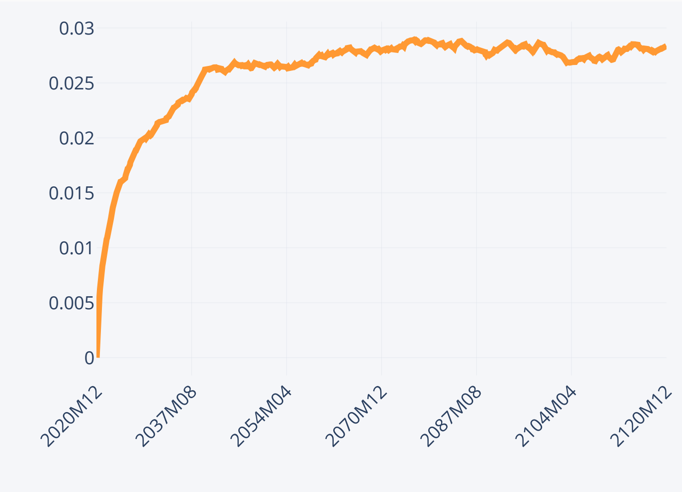


Simulated Data: There are 1200 Time Periods. Percentiles, Mean and Median are calculated across 10000 PATHS.
Percentiles Plotted : Min, 1%, 5%, 10%, 50%, 90%, 95%, 99%, Max
The distributions shown are across the paths for a given time period.

Simulation Summary

	BASE: 2021M12	BASE: 2050M12
mean	0.0423	0.0529
std	0.0084	0.0266
min	0.0145	0.0037
1%	0.0252	0.0127
5%	0.0296	0.0186
10%	0.0321	0.0235
50%	0.0417	0.0483
90%	0.0532	0.0896
95%	0.0567	0.1031
99%	0.0640	0.1344
max	0.0763	0.2106

Cross Sectional Volatility Over Time : BASE



US Treasury 28 Year Yield - Coupon
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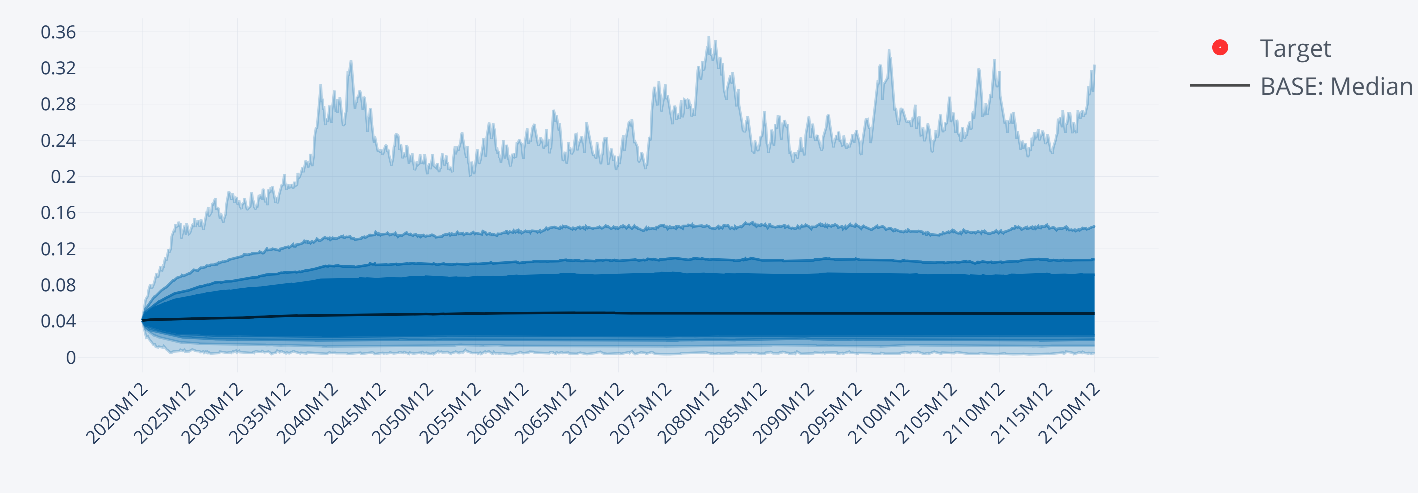
Simulated Data in Percentiles : US Treasury 28 Year Yield - Coupon

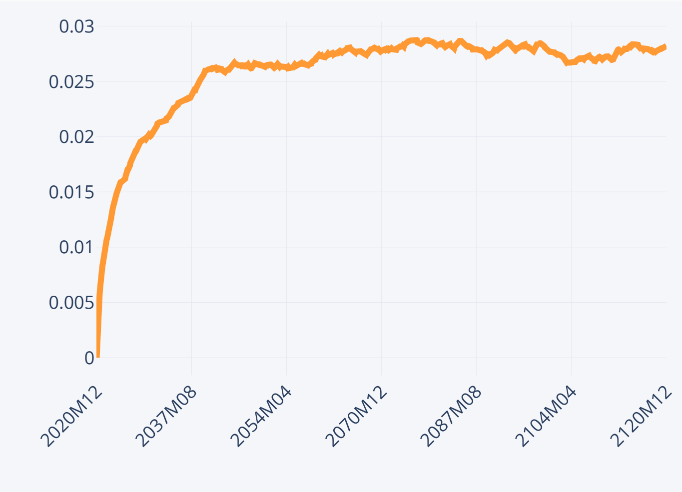


Simulated Data: There are 1200 Time Periods. Percentiles, Mean and Median are calculated across 10000 PATHS.
Percentiles Plotted : Min, 1%, 5%, 10%, 50%, 90%, 95%, 99%, Max
The distributions shown are across the paths for a given time period.

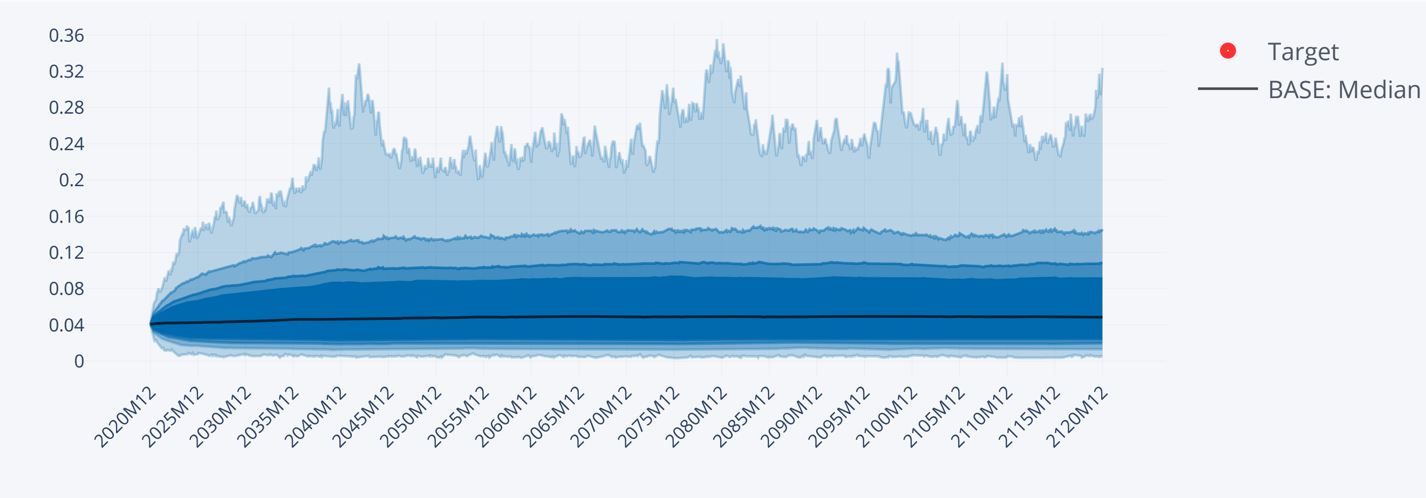
Simulation Summary

	BASE: 2021M12	BASE: 2050M12
mean	0.0423	0.0529
std	0.0083	0.0265
min	0.0149	0.0039
1%	0.0254	0.0131
5%	0.0297	0.0189
10%	0.0321	0.0238
50%	0.0417	0.0482
90%	0.0531	0.0894
95%	0.0566	0.1029
99%	0.0637	0.1342
max	0.0761	0.2103

Cross Sectional Volatility Over Time : BASE



Simulated Data in Percentiles : US Treasury 29 Year Yield - Coupon

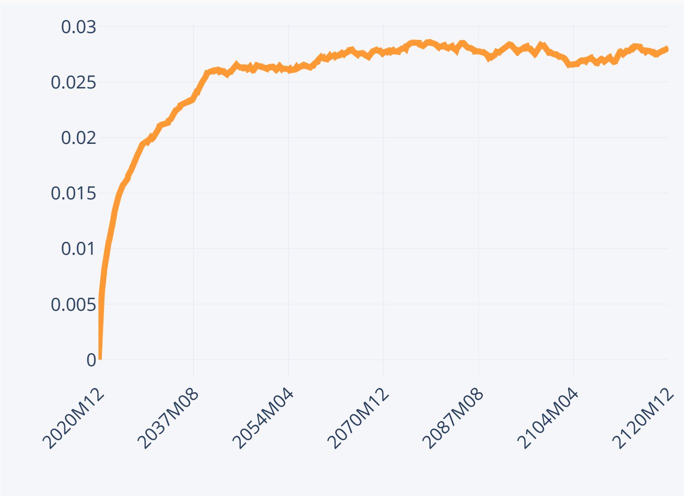


Simulated Data: There are 1200 Time Periods. Percentiles, Mean and Median are calculated across 10000 PATHS.
Percentiles Plotted : Min, 1%, 5%, 10%, 50%, 90%, 95%, 99%, Max
The distributions shown are across the paths for a given time period.

Simulation Summary

	BASE: 2021M12	BASE: 2050M12
mean	0.0422	0.0529
std	0.0082	0.0263
min	0.0152	0.0044
1%	0.0255	0.0135
5%	0.0298	0.0191
10%	0.0322	0.0240
50%	0.0417	0.0482
90%	0.0530	0.0892
95%	0.0564	0.1027
99%	0.0635	0.1340
max	0.0758	0.2101

Cross Sectional Volatility Over Time : BASE



US Treasury 30 Year Yield - Coupon

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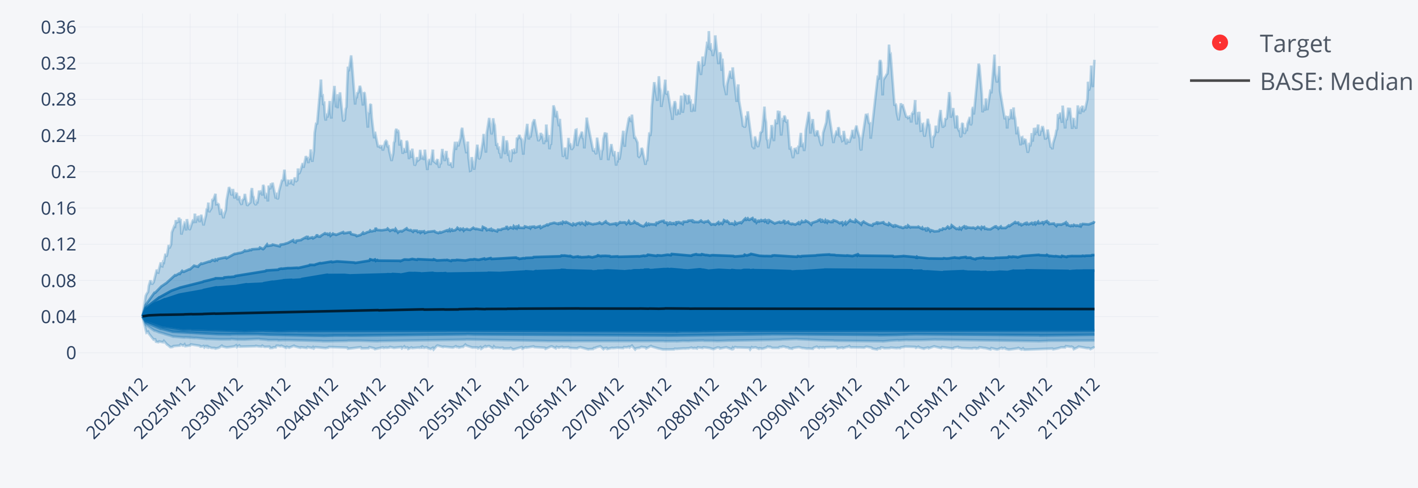
Simulated Data in Percentiles : US Treasury 30 Year Yield - Coupon

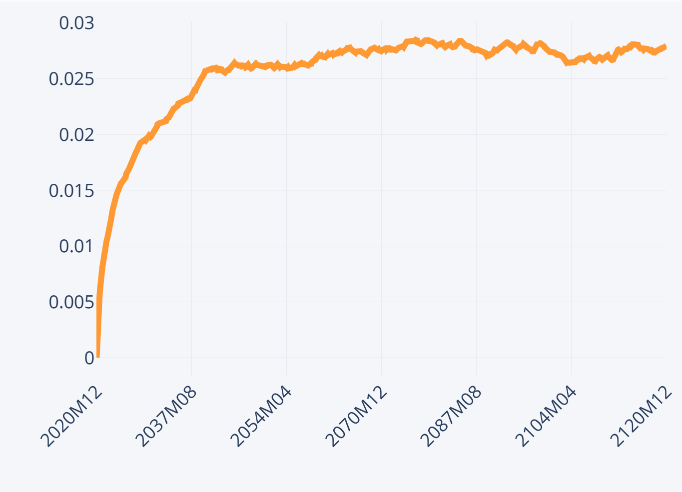


Simulated Data: There are 1200 Time Periods. Percentiles, Mean and Median are calculated across 10000 PATHS.
Percentiles Plotted : Min, 1%, 5%, 10%, 50%, 90%, 95%, 99%, Max
The distributions shown are across the paths for a given time period.

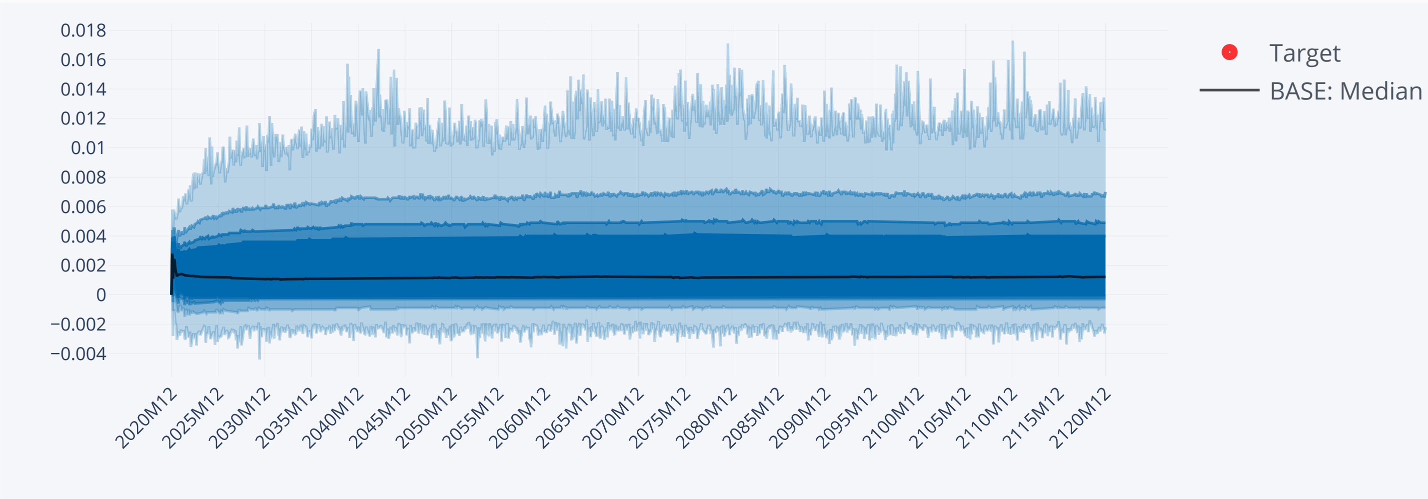
Simulation Summary

	BASE: 2021M12	BASE: 2050M12
mean	0.0422	0.0529
std	0.0081	0.0262
min	0.0155	0.0050
1%	0.0256	0.0139
5%	0.0299	0.0194
10%	0.0323	0.0242
50%	0.0416	0.0482
90%	0.0528	0.0890
95%	0.0562	0.1024
99%	0.0633	0.1338
max	0.0756	0.2098

Cross Sectional Volatility Over Time : BASE



Simulated Data in Percentiles : Money Market Price

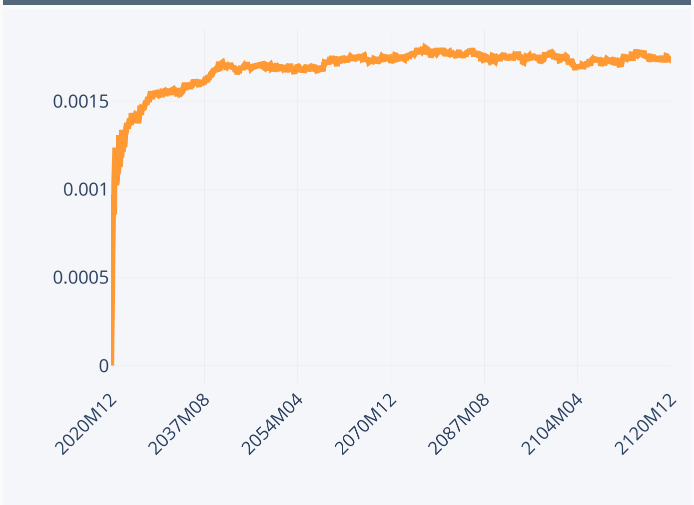


Simulated Data: There are 1200 Time Periods. Percentiles, Mean and Median are calculated across 10000 PATHS.
Percentiles Plotted : Min, 1%, 5%, 10%, 50%, 90%, 95%, 99%, Max
The distributions shown are across the paths for a given time period.

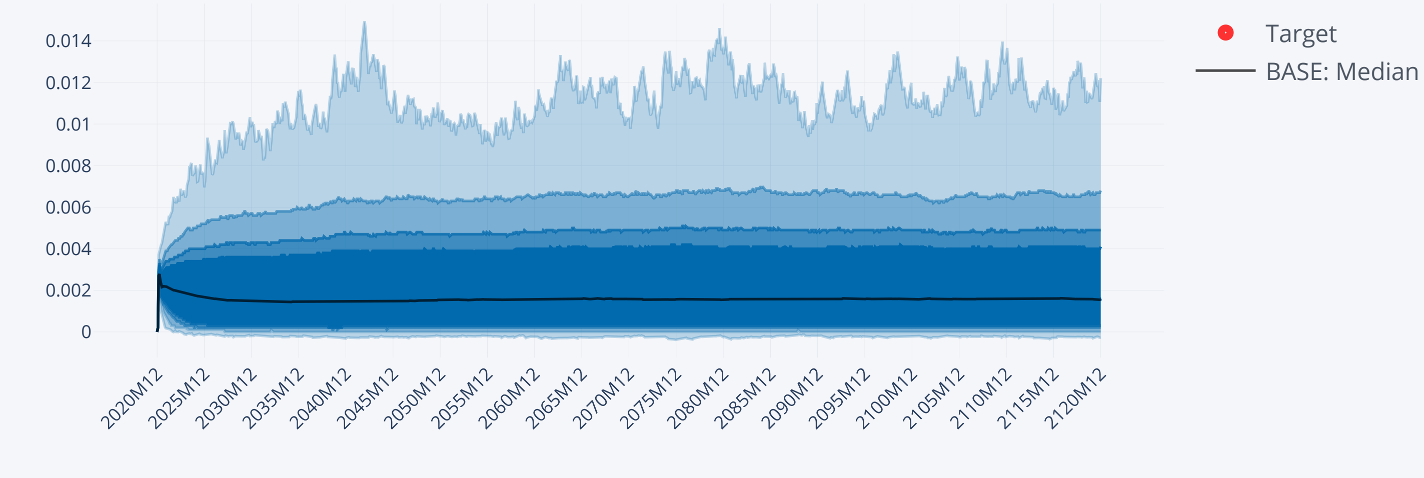
Simulation Summary

	BASE: 2021M12	BASE: 2050M12
mean	0.0015	0.0015
std	0.0010	0.0017
min	-0.0024	-0.0031
1%	-0.0008	-0.0009
5%	-0.0002	-0.0003
10%	0.0002	-0.0001
50%	0.0014	0.0011
90%	0.0028	0.0039
95%	0.0032	0.0048
99%	0.0041	0.0066
max	0.0060	0.0104

Cross Sectional Volatility Over Time : BASE



Simulated Data in Percentiles : Money Market Income

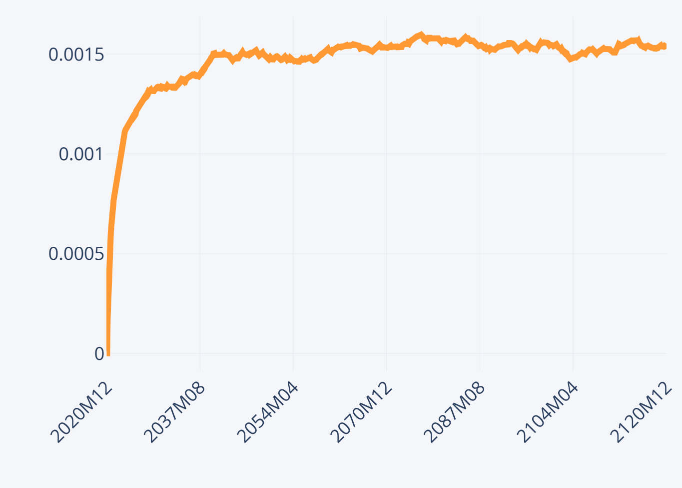


Simulated Data: There are 1200 Time Periods. Percentiles, Mean and Median are calculated across 10000 PATHS.
Percentiles Plotted : Min, 1%, 5%, 10%, 50%, 90%, 95%, 99%, Max
The distributions shown are across the paths for a given time period.

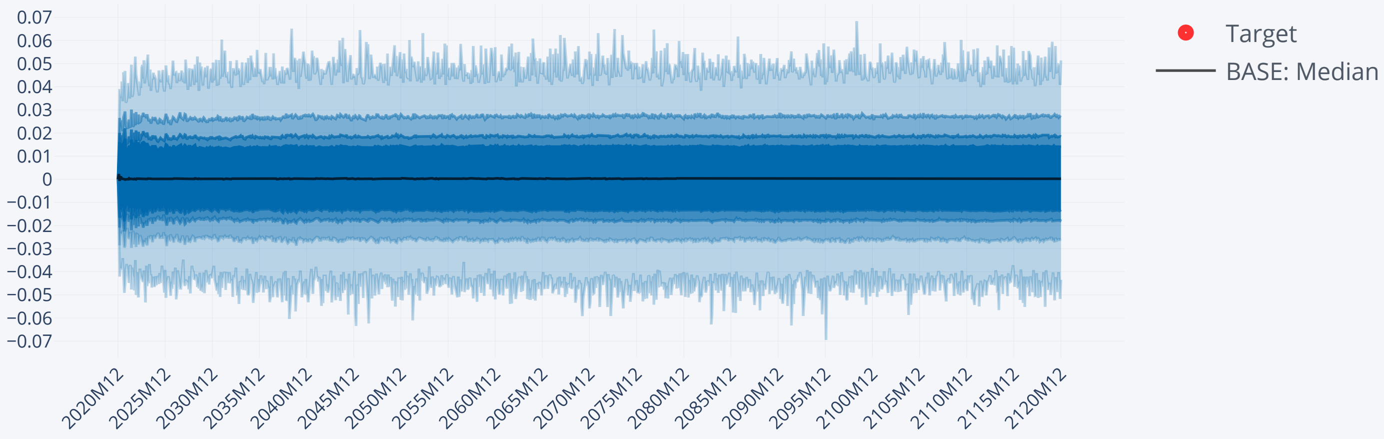
Simulation Summary

	BASE: 2021M12	BASE: 2050M12
mean	0.0022	0.0019
std	0.0007	0.0015
min	0.0002	-0.0002
1%	0.0007	0.0000
5%	0.0011	0.0002
10%	0.0013	0.0003
50%	0.0022	0.0015
90%	0.0031	0.0039
95%	0.0034	0.0047
99%	0.0039	0.0063
max	0.0052	0.0102

Cross Sectional Volatility Over Time : BASE



Simulated Data in Percentiles : Short Govt Bonds Price

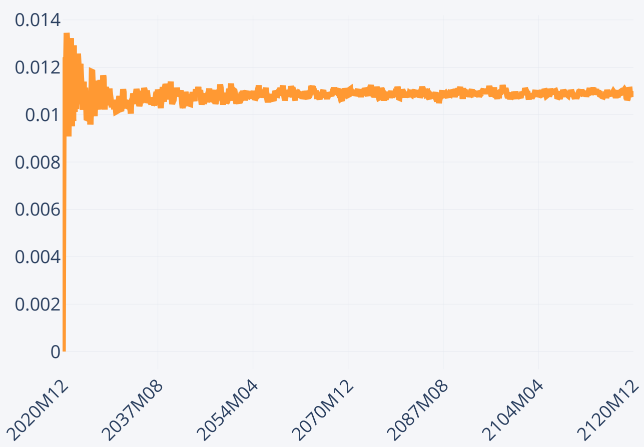


Simulated Data: There are 1200 Time Periods. Percentiles, Mean and Median are calculated across 10000 PATHS.
Percentiles Plotted : Min, 1%, 5%, 10%, 50%, 90%, 95%, 99%, Max
The distributions shown are across the paths for a given time period.

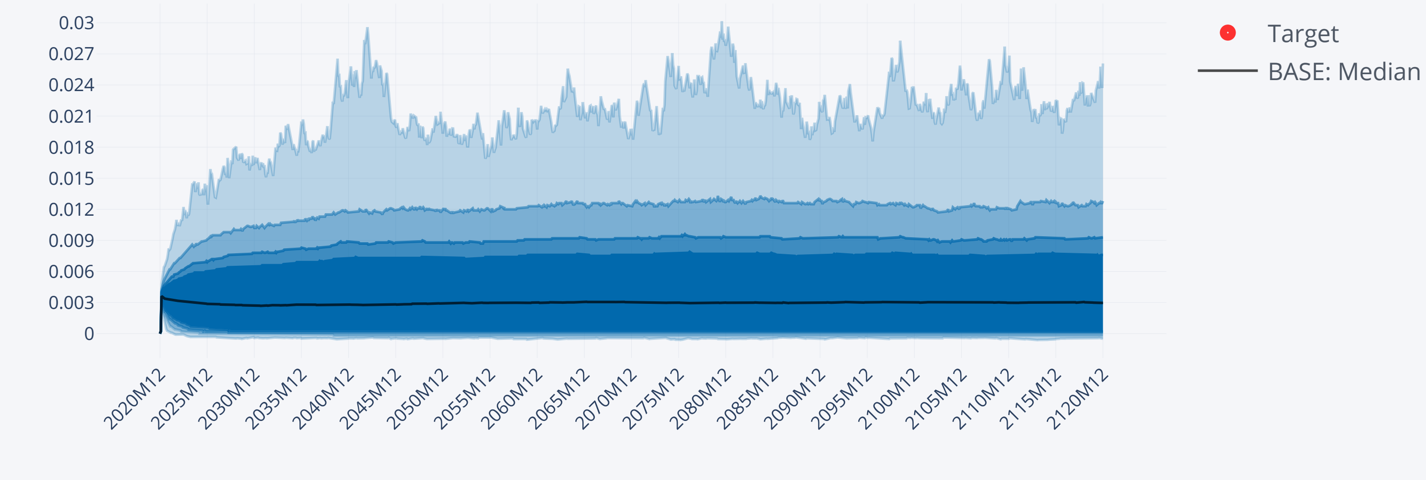
Simulation Summary

	BASE: 2021M12	BASE: 2050M12
mean	-0.0000	0.0003
std	0.0091	0.0110
min	-0.0390	-0.0521
1%	-0.0211	-0.0267
5%	-0.0150	-0.0177
10%	-0.0114	-0.0137
50%	0.0000	0.0003
90%	0.0114	0.0145
95%	0.0152	0.0191
99%	0.0219	0.0281
max	0.0370	0.0436

Cross Sectional Volatility Over Time : BASE



Simulated Data in Percentiles : Short Govt Bonds Income

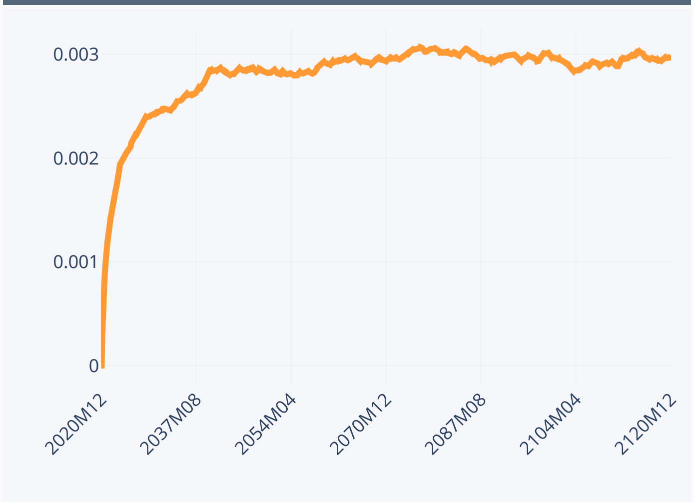


Simulated Data: There are 1200 Time Periods. Percentiles, Mean and Median are calculated across 10000 PATHS.
Percentiles Plotted : Min, 1%, 5%, 10%, 50%, 90%, 95%, 99%, Max
The distributions shown are across the paths for a given time period.

Simulation Summary

	BASE: 2021M12	BASE: 2050M12
mean	0.0033	0.0034
std	0.0012	0.0028
min	0.0002	-0.0005
1%	0.0008	-0.0001
5%	0.0014	0.0001
10%	0.0018	0.0002
50%	0.0033	0.0029
90%	0.0048	0.0074
95%	0.0053	0.0088
99%	0.0062	0.0120
max	0.0081	0.0193

Cross Sectional Volatility Over Time : BASE



Int Govt Bonds Price
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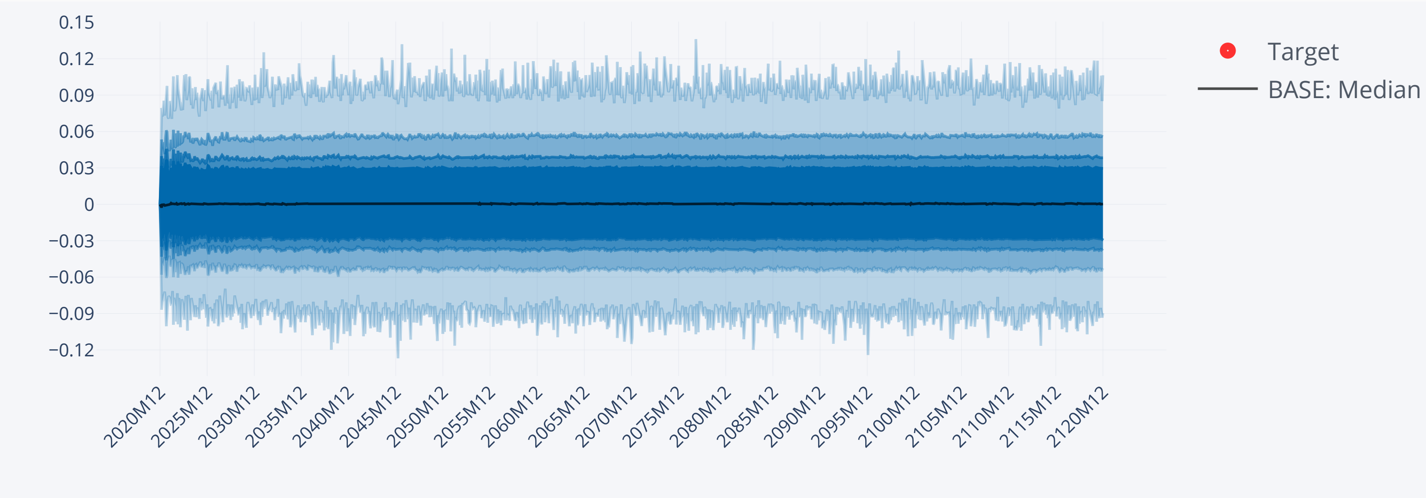
Simulated Data in Percentiles : Int Govt Bonds Price

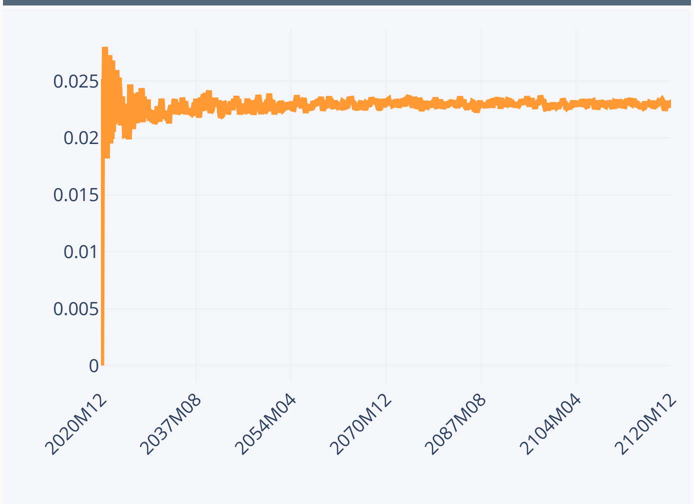


Simulated Data: There are 1200 Time Periods. Percentiles, Mean and Median are calculated across 10000 PATHS.
Percentiles Plotted : Min, 1%, 5%, 10%, 50%, 90%, 95%, 99%, Max
The distributions shown are across the paths for a given time period.

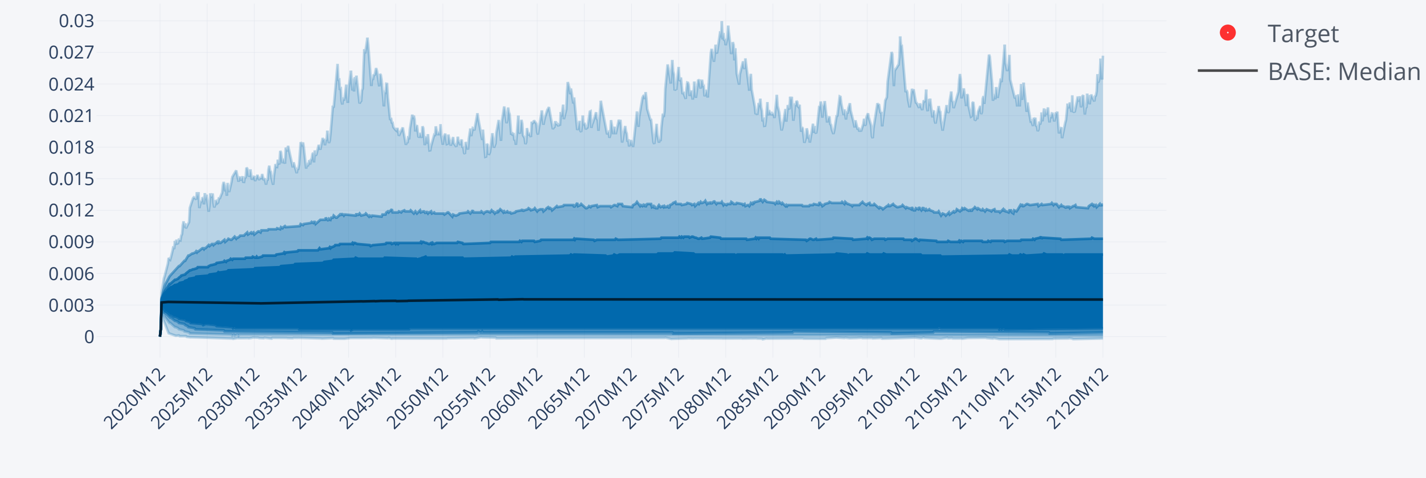
Simulation Summary

	BASE: 2021M12	BASE: 2050M12
mean	-0.0000	0.0007
std	0.0182	0.0232
min	-0.0764	-0.1068
1%	-0.0424	-0.0543
5%	-0.0299	-0.0372
10%	-0.0227	-0.0286
50%	-0.0002	0.0005
90%	0.0231	0.0304
95%	0.0305	0.0400
99%	0.0439	0.0576
max	0.0776	0.0888

Cross Sectional Volatility Over Time : BASE



Simulated Data in Percentiles : Int Govt Bonds Income

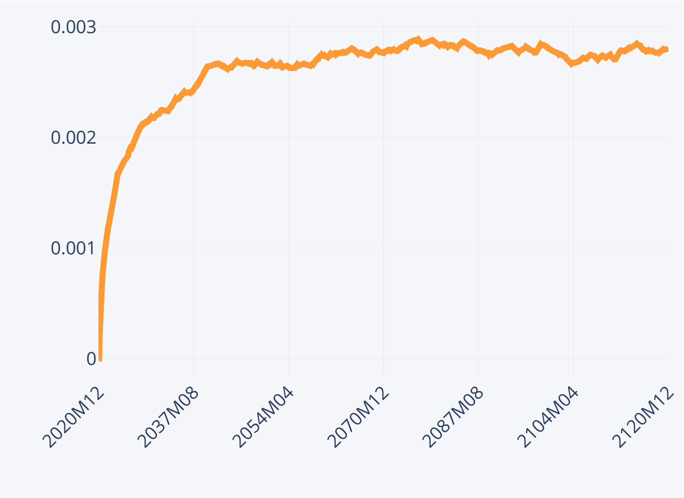


Simulated Data: There are 1200 Time Periods. Percentiles, Mean and Median are calculated across 10000 PATHS.
Percentiles Plotted : Min, 1%, 5%, 10%, 50%, 90%, 95%, 99%, Max
The distributions shown are across the paths for a given time period.

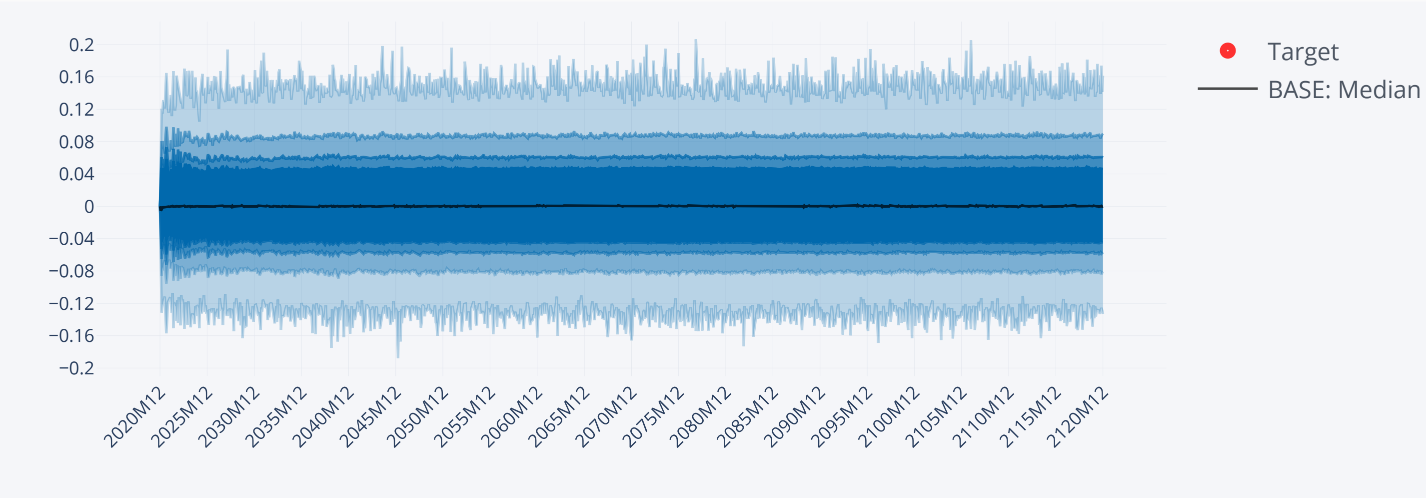
Simulation Summary

	BASE: 2021M12	BASE: 2050M12
mean	0.0033	0.0039
std	0.0010	0.0027
min	0.0003	-0.0002
1%	0.0013	0.0001
5%	0.0018	0.0004
10%	0.0021	0.0007
50%	0.0033	0.0035
90%	0.0046	0.0076
95%	0.0050	0.0088
99%	0.0057	0.0117
max	0.0074	0.0182

Cross Sectional Volatility Over Time : BASE



Simulated Data in Percentiles : Long Govt Bonds Price

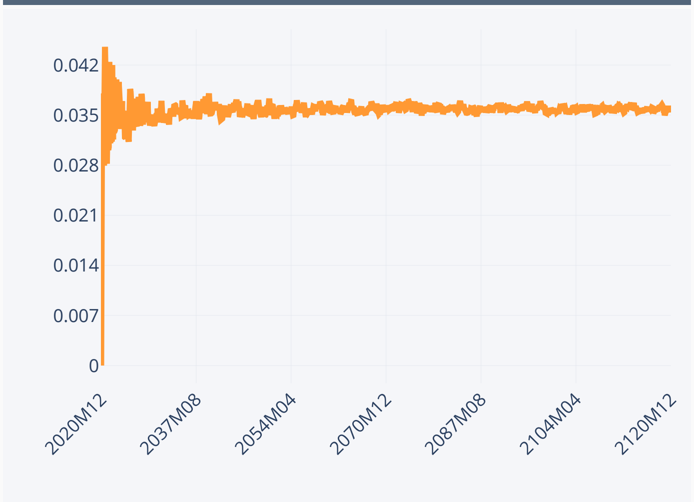


Simulated Data: There are 1200 Time Periods. Percentiles, Mean and Median are calculated across 10000 PATHS.
Percentiles Plotted : Min, 1%, 5%, 10%, 50%, 90%, 95%, 99%, Max
The distributions shown are across the paths for a given time period.

Simulation Summary

	BASE: 2021M12	BASE: 2050M12
mean	-0.0005	0.0010
std	0.0282	0.0362
min	-0.1169	-0.1547
1%	-0.0660	-0.0822
5%	-0.0461	-0.0568
10%	-0.0360	-0.0441
50%	-0.0008	0.0005
90%	0.0356	0.0479
95%	0.0470	0.0625
99%	0.0678	0.0875
max	0.1234	0.1465

Cross Sectional Volatility Over Time : BASE



Long Govt Bonds Income
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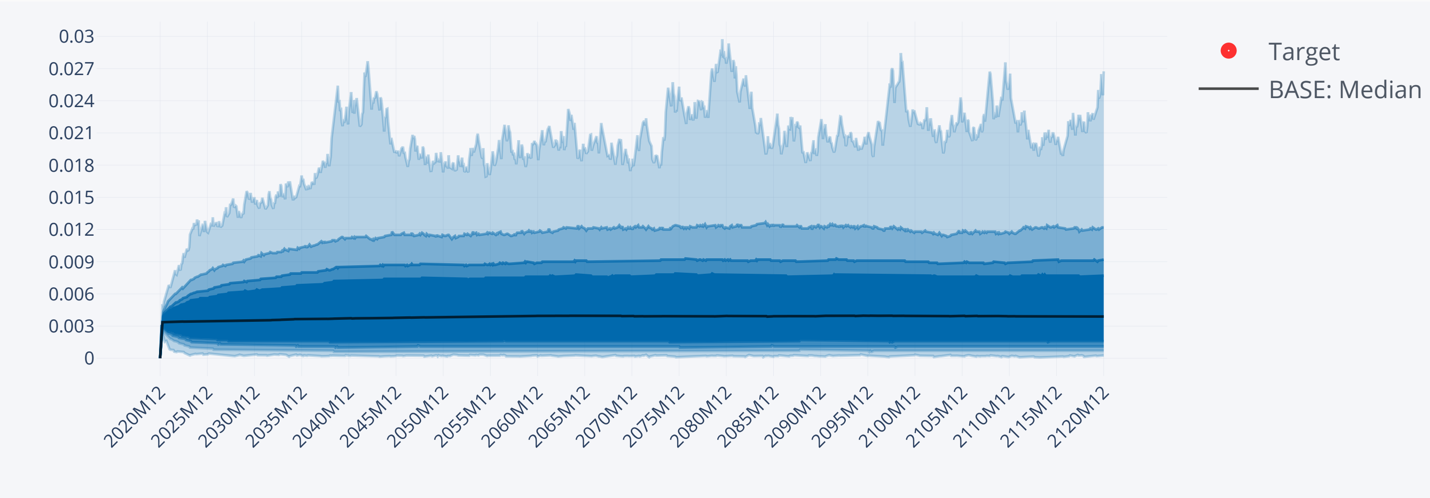
Simulated Data in Percentiles : Long Govt Bonds Income

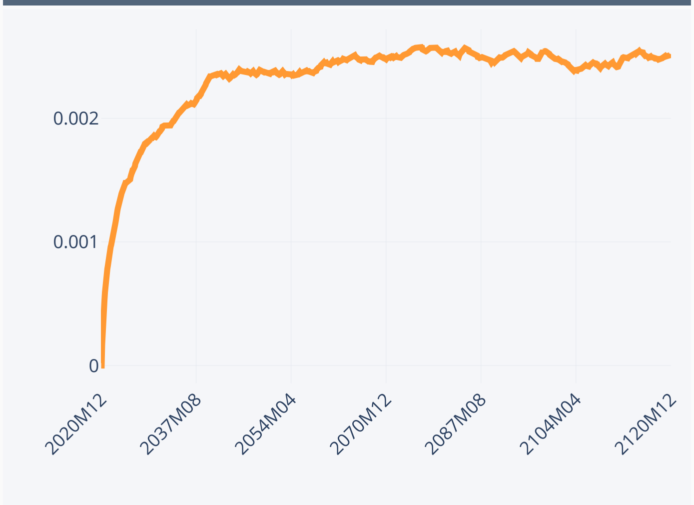


Simulated Data: There are 1200 Time Periods. Percentiles, Mean and Median are calculated across 10000 PATHS.
Percentiles Plotted : Min, 1%, 5%, 10%, 50%, 90%, 95%, 99%, Max
The distributions shown are across the paths for a given time period.

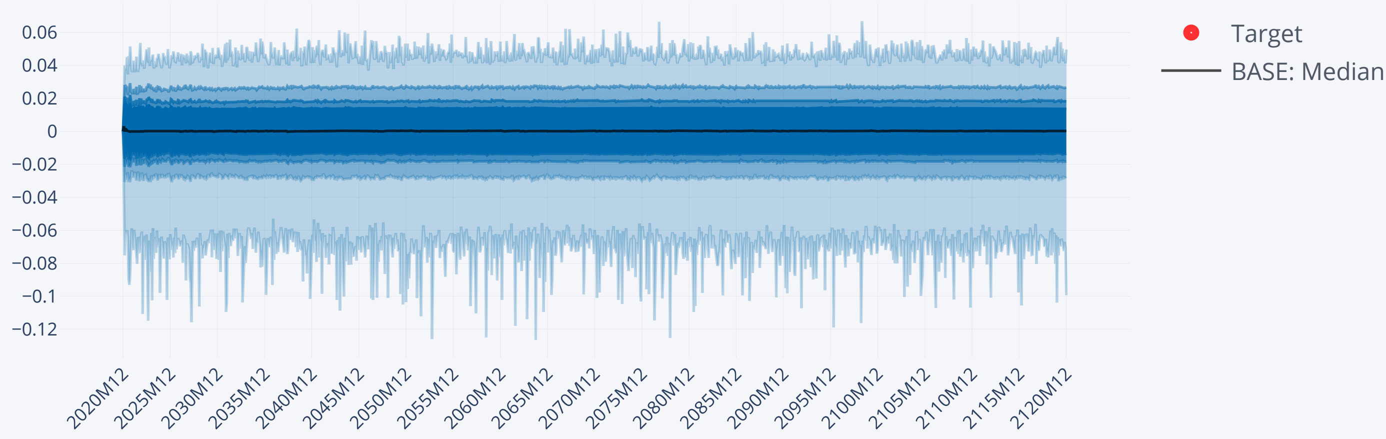
Simulation Summary

	BASE: 2021M12	BASE: 2050M12
mean	0.0035	0.0043
std	0.0008	0.0024
min	0.0008	0.0002
1%	0.0018	0.0007
5%	0.0023	0.0011
10%	0.0025	0.0015
50%	0.0034	0.0039
90%	0.0045	0.0075
95%	0.0048	0.0087
99%	0.0054	0.0114
max	0.0067	0.0173

Cross Sectional Volatility Over Time : BASE



Simulated Data in Percentiles : Short Inv Corp Bonds Price

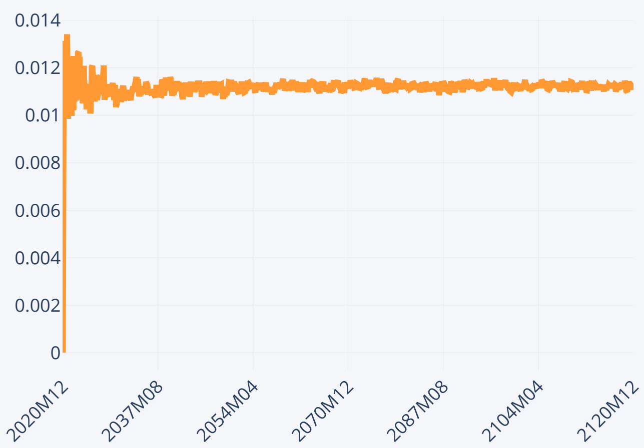


Simulated Data: There are 1200 Time Periods. Percentiles, Mean and Median are calculated across 10000 PATHS.
Percentiles Plotted : Min, 1%, 5%, 10%, 50%, 90%, 95%, 99%, Max
The distributions shown are across the paths for a given time period.

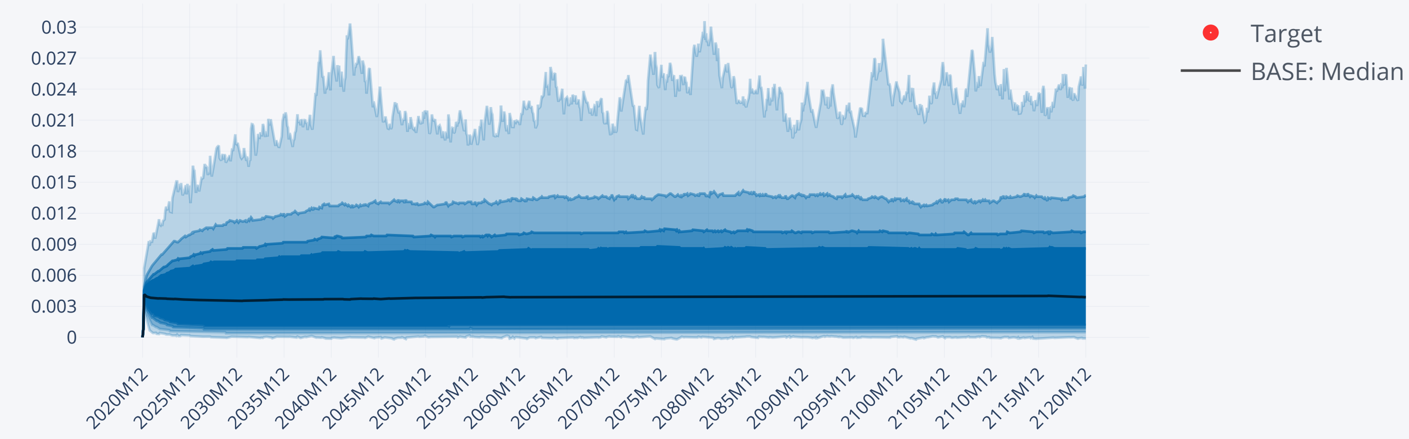
Simulation Summary

	BASE: 2021M12	BASE: 2050M12
mean	-0.0003	0.0001
std	0.0100	0.0114
min	-0.0698	-0.1036
1%	-0.0247	-0.0278
5%	-0.0160	-0.0182
10%	-0.0124	-0.0137
50%	-0.0002	0.0001
90%	0.0121	0.0142
95%	0.0158	0.0188
99%	0.0227	0.0275
max	0.0365	0.0448

Cross Sectional Volatility Over Time : BASE



Simulated Data in Percentiles : Short Inv Corp Bonds Income

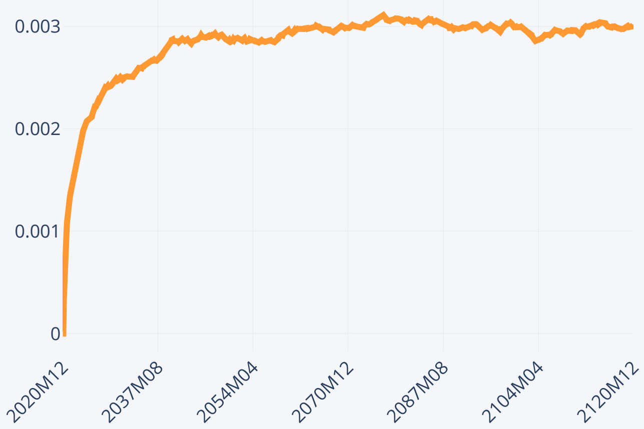


Simulated Data: There are 1200 Time Periods. Percentiles, Mean and Median are calculated across 10000 PATHS.
Percentiles Plotted : Min, 1%, 5%, 10%, 50%, 90%, 95%, 99%, Max
The distributions shown are across the paths for a given time period.

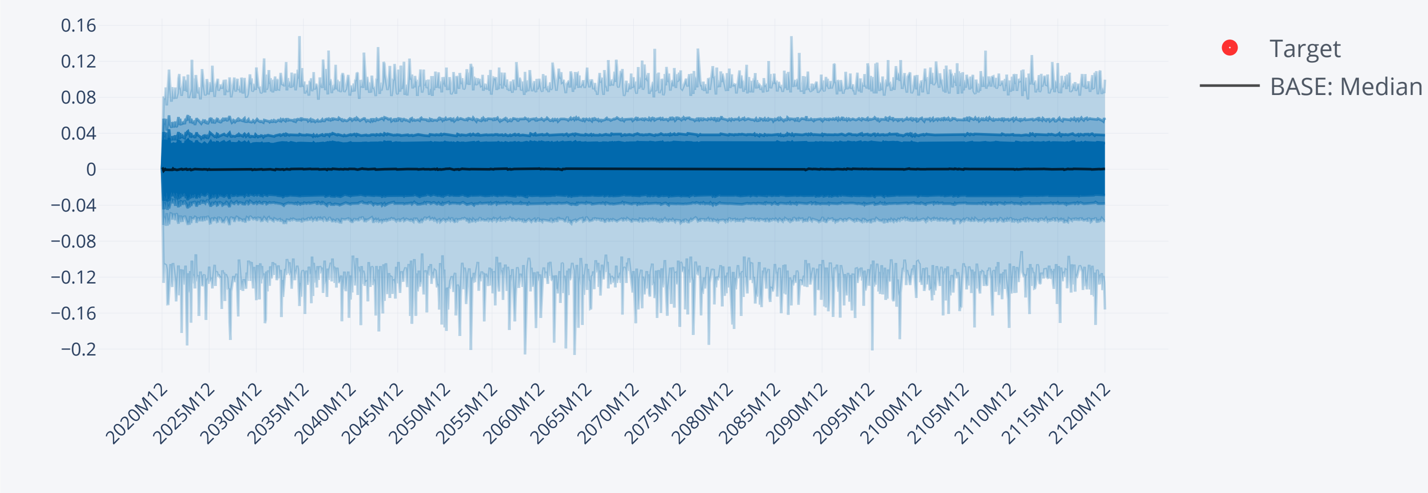
Simulation Summary

	BASE: 2021M12	BASE: 2050M12
mean	0.0039	0.0044
std	0.0012	0.0029
min	0.0005	0.0001
1%	0.0012	0.0005
5%	0.0019	0.0008
10%	0.0023	0.0011
50%	0.0038	0.0038
90%	0.0055	0.0083
95%	0.0060	0.0098
99%	0.0069	0.0130
max	0.0092	0.0219

Cross Sectional Volatility Over Time : BASE



Simulated Data in Percentiles : Int Inv Corp Bonds Price

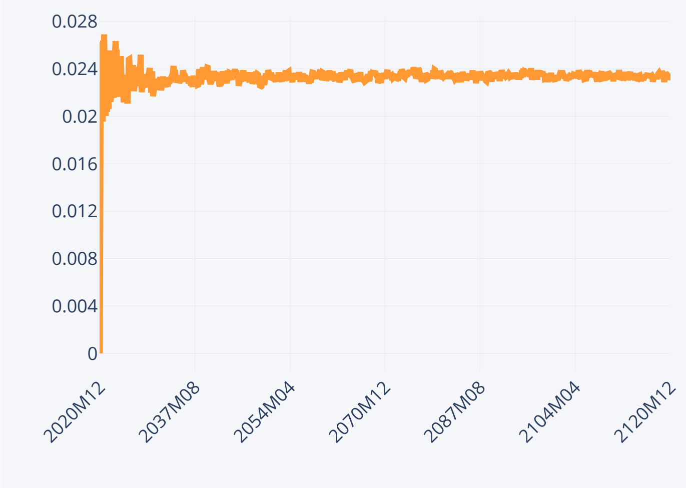


Simulated Data: There are 1200 Time Periods. Percentiles, Mean and Median are calculated across 10000 PATHS.
Percentiles Plotted : Min, 1%, 5%, 10%, 50%, 90%, 95%, 99%, Max
The distributions shown are across the paths for a given time period.

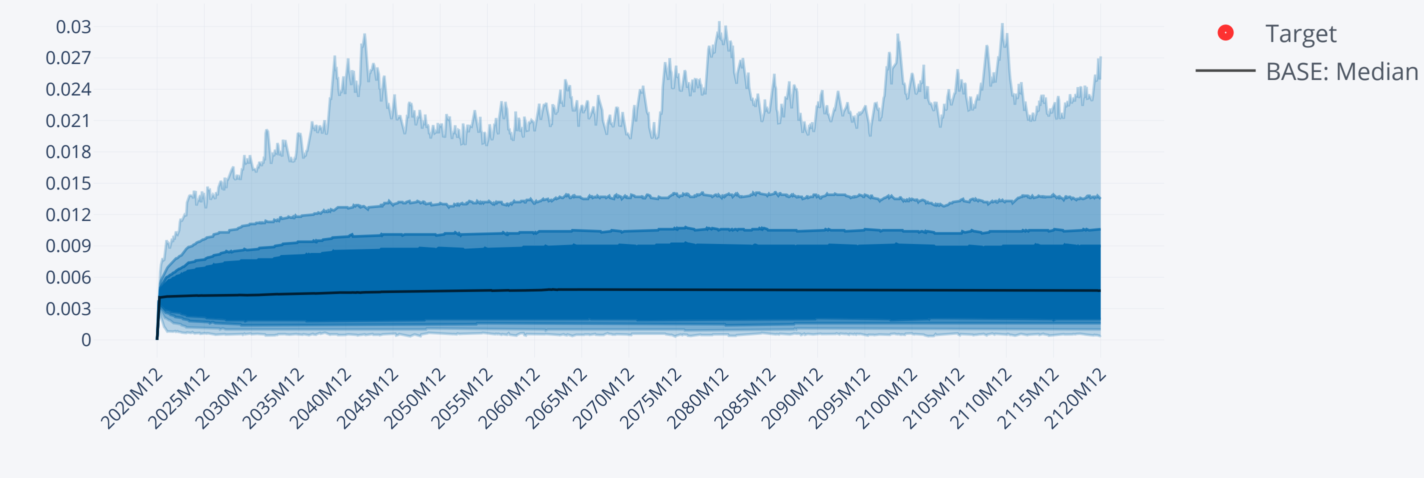
Simulation Summary

	BASE: 2021M12	BASE: 2050M12
mean	-0.0008	0.0001
std	0.0200	0.0236
min	-0.1250	-0.1759
1%	-0.0495	-0.0567
5%	-0.0326	-0.0380
10%	-0.0256	-0.0292
50%	-0.0007	0.0001
90%	0.0244	0.0303
95%	0.0322	0.0390
99%	0.0462	0.0563
max	0.0751	0.0927

Cross Sectional Volatility Over Time : BASE



Simulated Data in Percentiles : Int Inv Corp Bonds Income

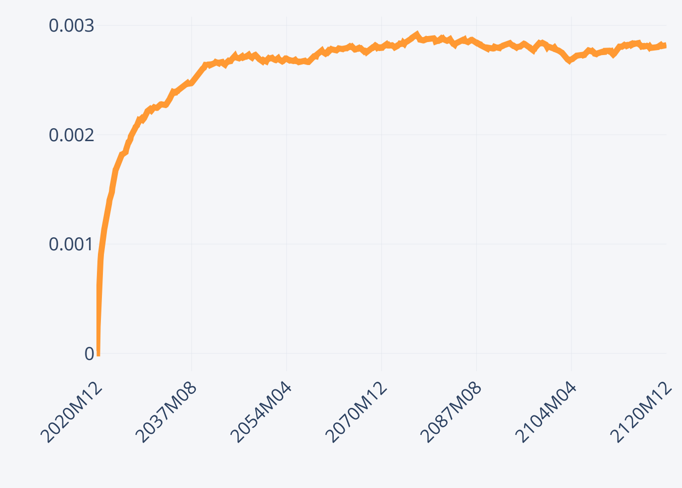


Simulated Data: There are 1200 Time Periods. Percentiles, Mean and Median are calculated across 10000 PATHS.
Percentiles Plotted : Min, 1%, 5%, 10%, 50%, 90%, 95%, 99%, Max
The distributions shown are across the paths for a given time period.

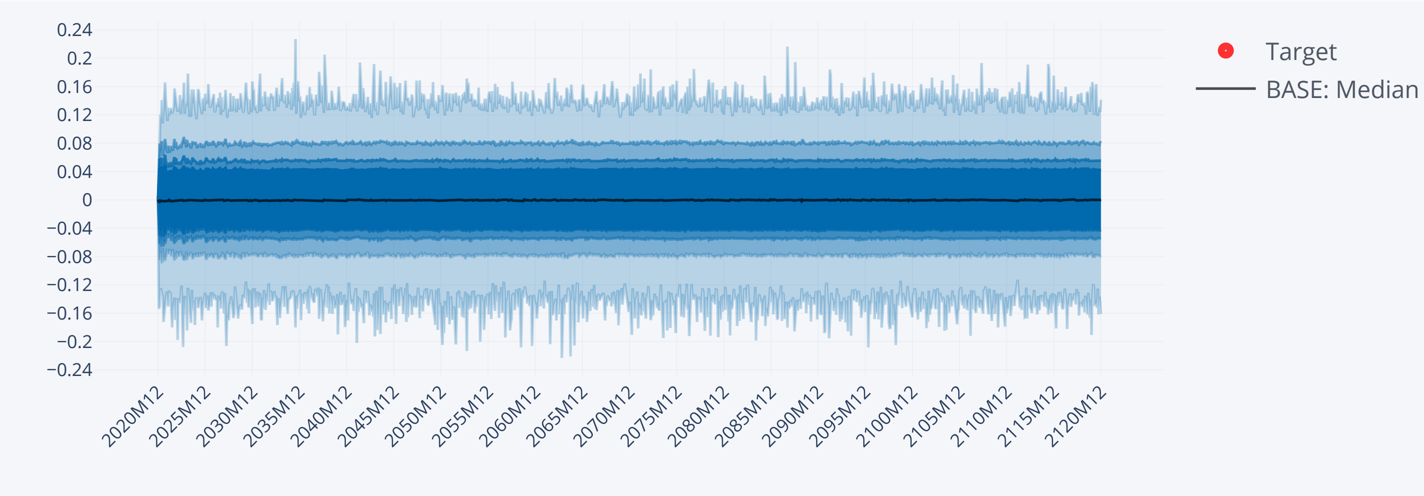
Simulation Summary

	BASE: 2021M12	BASE: 2050M12
mean	0.0042	0.0051
std	0.0010	0.0027
min	0.0008	0.0006
1%	0.0020	0.0010
5%	0.0026	0.0015
10%	0.0029	0.0019
50%	0.0041	0.0047
90%	0.0055	0.0088
95%	0.0060	0.0101
99%	0.0068	0.0131
max	0.0096	0.0205

Cross Sectional Volatility Over Time : BASE



Simulated Data in Percentiles : Long Inv Corp Bonds Price

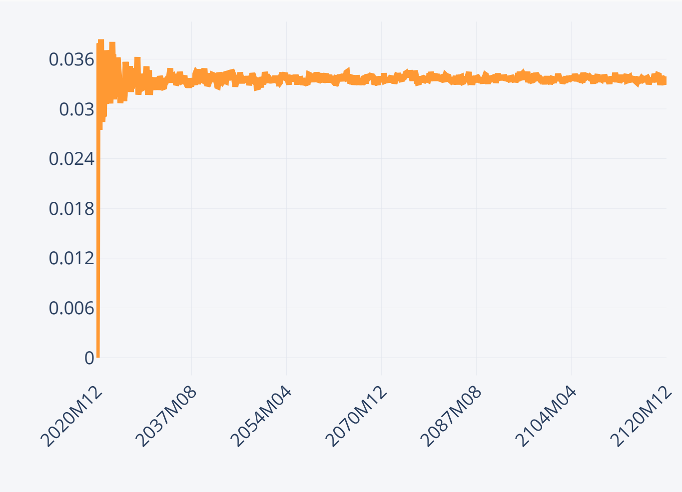


Simulated Data: There are 1200 Time Periods. Percentiles, Mean and Median are calculated across 10000 PATHS.
Percentiles Plotted : Min, 1%, 5%, 10%, 50%, 90%, 95%, 99%, Max
The distributions shown are across the paths for a given time period.

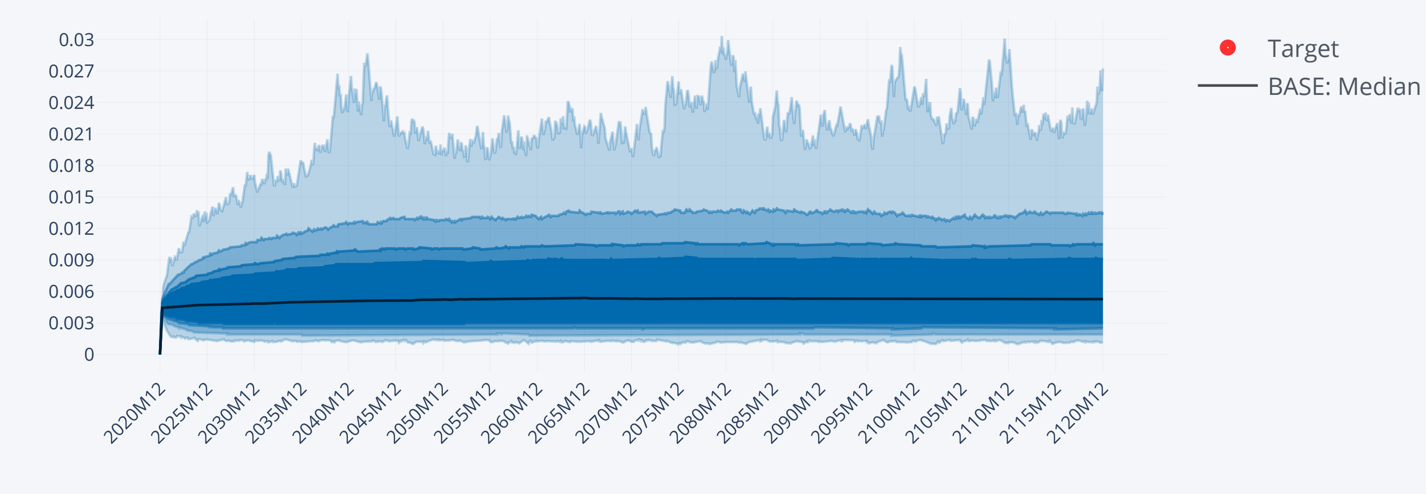
Simulation Summary

	BASE: 2021M12	BASE: 2050M12
mean	-0.0015	0.0000
std	0.0284	0.0338
min	-0.1417	-0.1950
1%	-0.0693	-0.0789
5%	-0.0472	-0.0545
10%	-0.0370	-0.0423
50%	-0.0016	-0.0004
90%	0.0348	0.0437
95%	0.0455	0.0560
99%	0.0660	0.0802
max	0.1112	0.1411

Cross Sectional Volatility Over Time : BASE



Simulated Data in Percentiles : Long Inv Corp Bonds Income

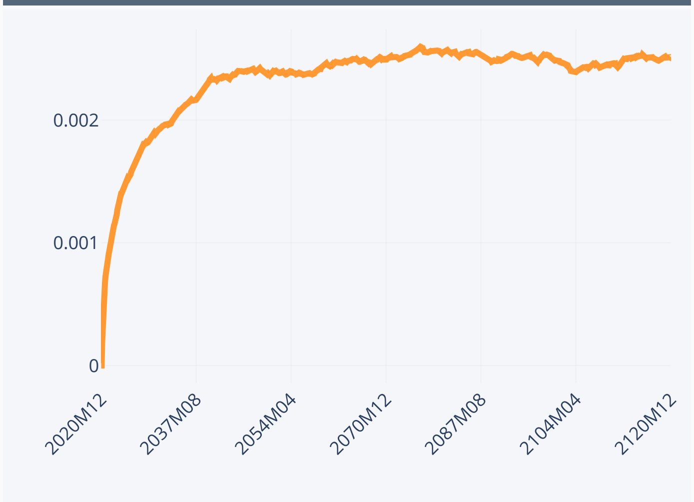


Simulated Data: There are 1200 Time Periods. Percentiles, Mean and Median are calculated across 10000 PATHS.
Percentiles Plotted : Min, 1%, 5%, 10%, 50%, 90%, 95%, 99%, Max
The distributions shown are across the paths for a given time period.

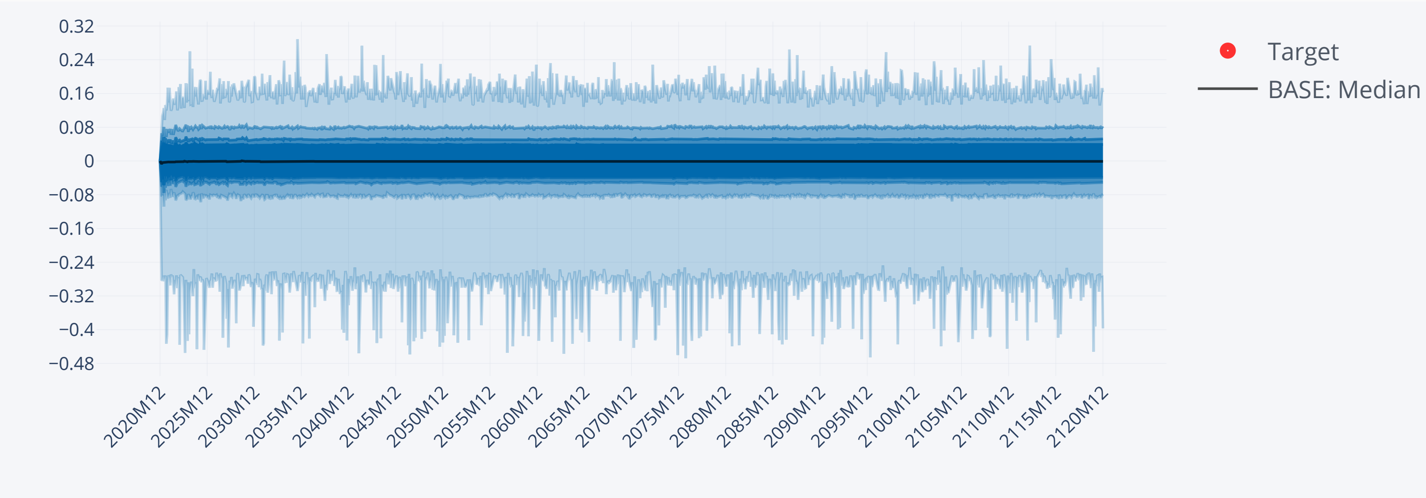
Simulation Summary

	BASE: 2021M12	BASE: 2050M12
mean	0.0046	0.0056
std	0.0008	0.0024
min	0.0017	0.0014
1%	0.0029	0.0019
5%	0.0033	0.0024
10%	0.0036	0.0029
50%	0.0045	0.0052
90%	0.0057	0.0089
95%	0.0060	0.0101
99%	0.0067	0.0127
max	0.0093	0.0194

Cross Sectional Volatility Over Time : BASE



Simulated Data in Percentiles : High Yield Corp Bonds Price

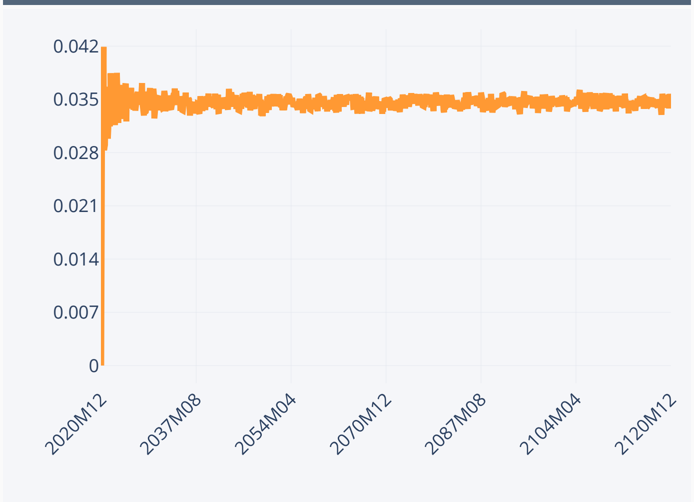


Simulated Data: There are 1200 Time Periods. Percentiles, Mean and Median are calculated across 10000 PATHS.
Percentiles Plotted : Min, 1%, 5%, 10%, 50%, 90%, 95%, 99%, Max
The distributions shown are across the paths for a given time period.

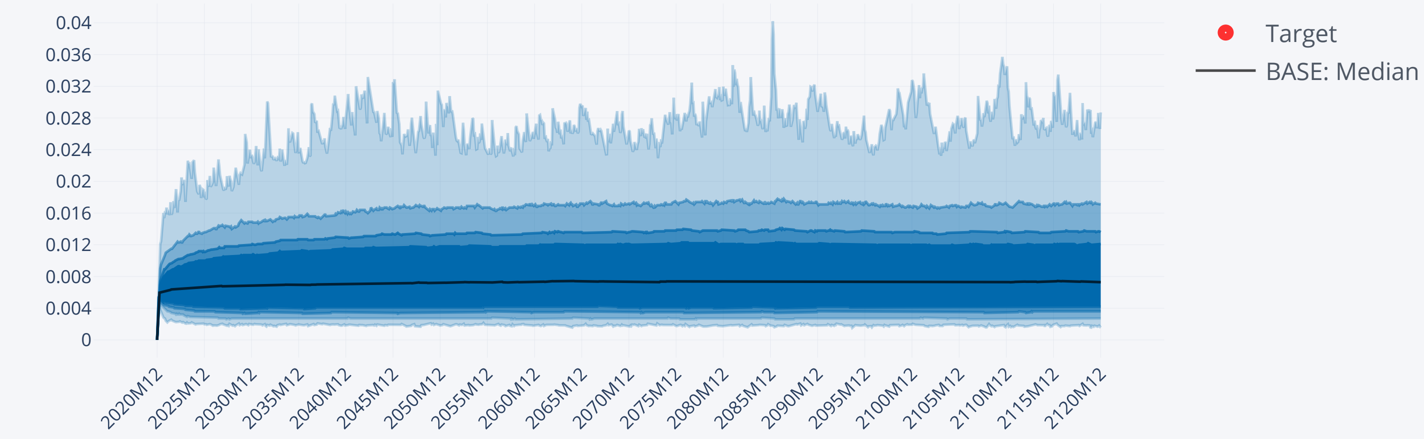
Simulation Summary

	BASE: 2021M12	BASE: 2050M12
mean	-0.0032	-0.0013
std	0.0330	0.0348
min	-0.2798	-0.4303
1%	-0.0760	-0.0813
5%	-0.0498	-0.0520
10%	-0.0382	-0.0394
50%	-0.0025	-0.0009
90%	0.0339	0.0385
95%	0.0459	0.0522
99%	0.0698	0.0780
max	0.1733	0.1551

Cross Sectional Volatility Over Time : BASE



Simulated Data in Percentiles : High Yield Corp Bonds Income

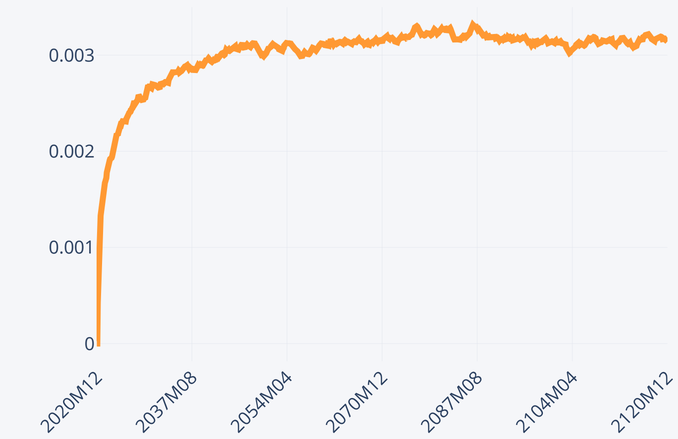


Simulated Data: There are 1200 Time Periods. Percentiles, Mean and Median are calculated across 10000 PATHS.
Percentiles Plotted : Min, 1%, 5%, 10%, 50%, 90%, 95%, 99%, Max
The distributions shown are across the paths for a given time period.

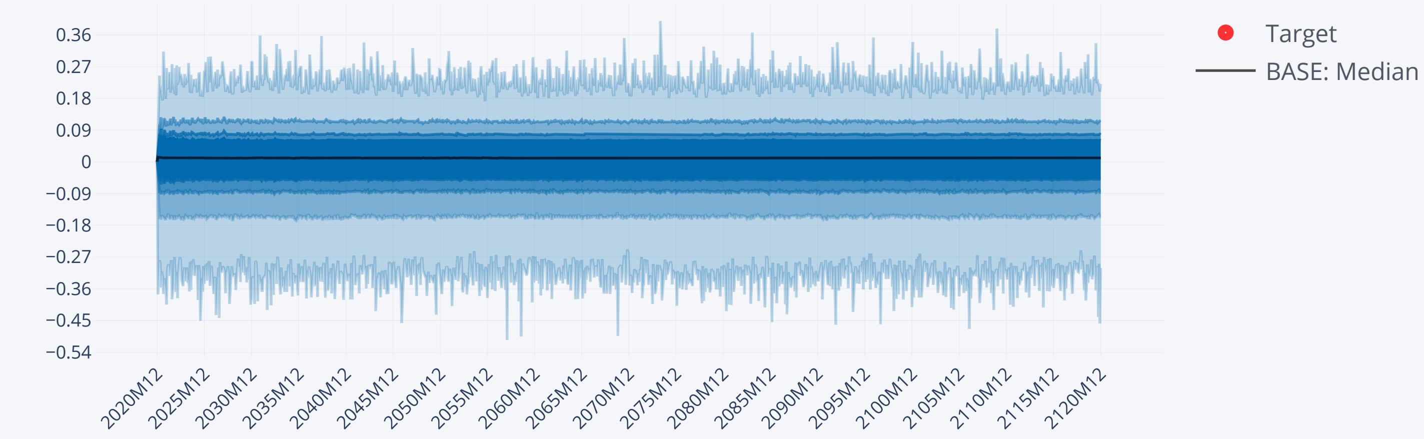
Simulation Summary

	BASE: 2021M12	BASE: 2050M12
mean	0.0064	0.0077
std	0.0015	0.0031
min	0.0022	0.0018
1%	0.0036	0.0027
5%	0.0043	0.0034
10%	0.0047	0.0041
50%	0.0062	0.0072
90%	0.0084	0.0118
95%	0.0092	0.0133
99%	0.0111	0.0163
max	0.0167	0.0303

Cross Sectional Volatility Over Time : BASE



Simulated Data in Percentiles : Small Cap Price

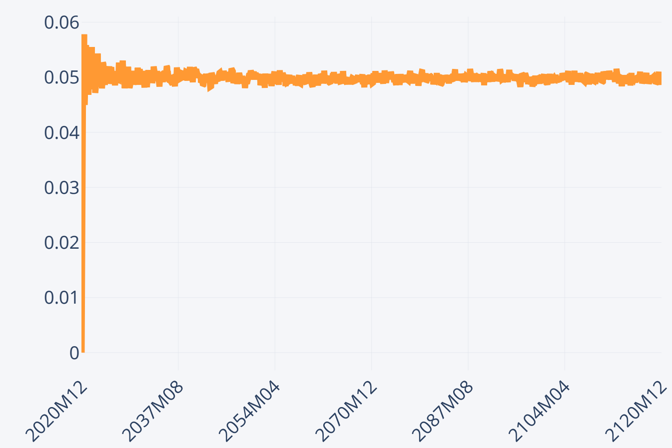


Simulated Data: There are 1200 Time Periods. Percentiles, Mean and Median are calculated across 10000 PATHS.
Percentiles Plotted : Min, 1%, 5%, 10%, 50%, 90%, 95%, 99%, Max
The distributions shown are across the paths for a given time period.

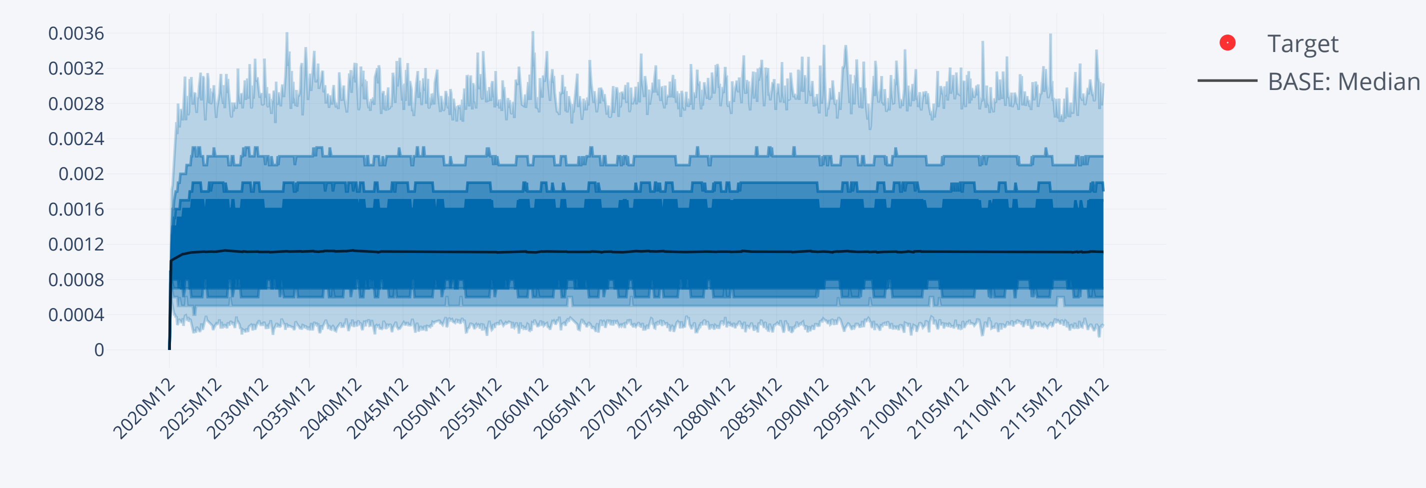
Simulation Summary

	BASE: 2021M12	BASE: 2050M12
mean	0.0073	0.0065
std	0.0494	0.0507
min	-0.4051	-0.3303
1%	-0.1553	-0.1587
5%	-0.0803	-0.0856
10%	-0.0484	-0.0514
50%	0.0111	0.0107
90%	0.0624	0.0615
95%	0.0770	0.0790
99%	0.1103	0.1133
max	0.2660	0.2608

Cross Sectional Volatility Over Time : BASE



Simulated Data in Percentiles : Small Cap Income

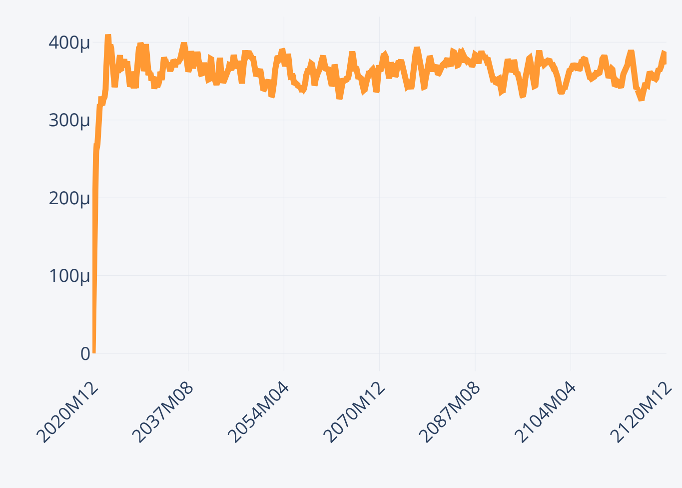


Simulated Data: There are 1200 Time Periods. Percentiles, Mean and Median are calculated across 10000 PATHS.
Percentiles Plotted : Min, 1%, 5%, 10%, 50%, 90%, 95%, 99%, Max
The distributions shown are across the paths for a given time period.

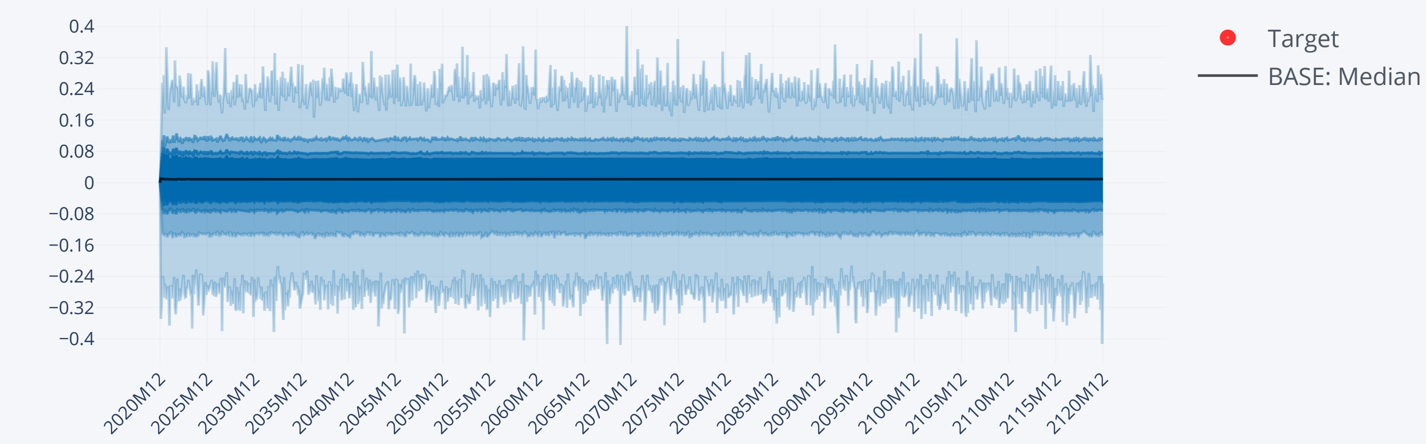
Simulation Summary

	BASE: 2021M12	BASE: 2050M12
mean	0.0011	0.0012
std	0.0003	0.0003
min	0.0003	0.0004
1%	0.0005	0.0005
5%	0.0007	0.0007
10%	0.0007	0.0008
50%	0.0011	0.0011
90%	0.0015	0.0016
95%	0.0016	0.0018
99%	0.0019	0.0021
max	0.0026	0.0027

Cross Sectional Volatility Over Time : BASE



Simulated Data in Percentiles : Mid Cap Price

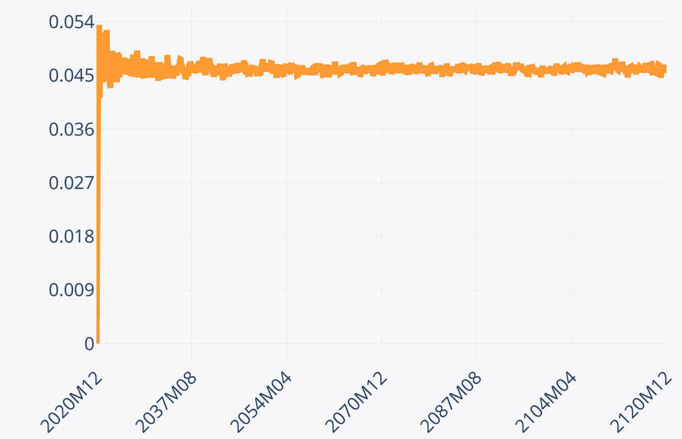


Simulated Data: There are 1200 Time Periods. Percentiles, Mean and Median are calculated across 10000 PATHS.
Percentiles Plotted : Min, 1%, 5%, 10%, 50%, 90%, 95%, 99%, Max
The distributions shown are across the paths for a given time period.

Simulation Summary

	BASE: 2021M12	BASE: 2050M12
mean	0.0062	0.0063
std	0.0445	0.0464
min	-0.3657	-0.2822
1%	-0.1300	-0.1334
5%	-0.0693	-0.0718
10%	-0.0464	-0.0492
50%	0.0085	0.0085
90%	0.0577	0.0593
95%	0.0718	0.0754
99%	0.1046	0.1111
max	0.2234	0.2031

Cross Sectional Volatility Over Time : BASE



Mid Cap Income
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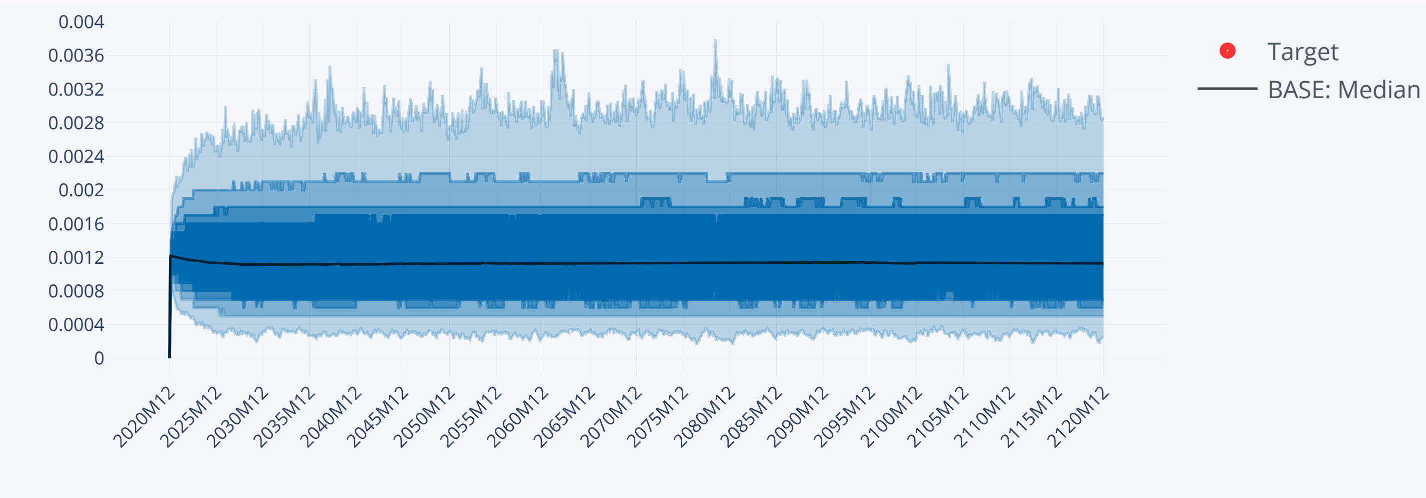
Simulated Data in Percentiles : Mid Cap Income

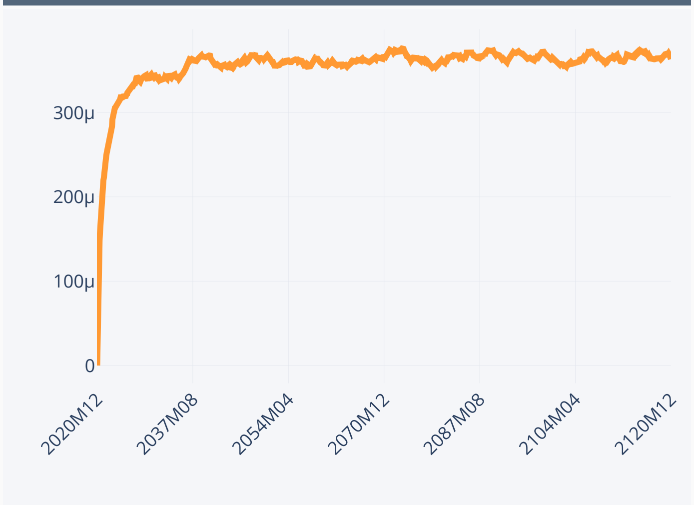


Simulated Data: There are 1200 Time Periods. Percentiles, Mean and Median are calculated across 10000 PATHS.
Percentiles Plotted : Min, 1%, 5%, 10%, 50%, 90%, 95%, 99%, Max
The distributions shown are across the paths for a given time period.

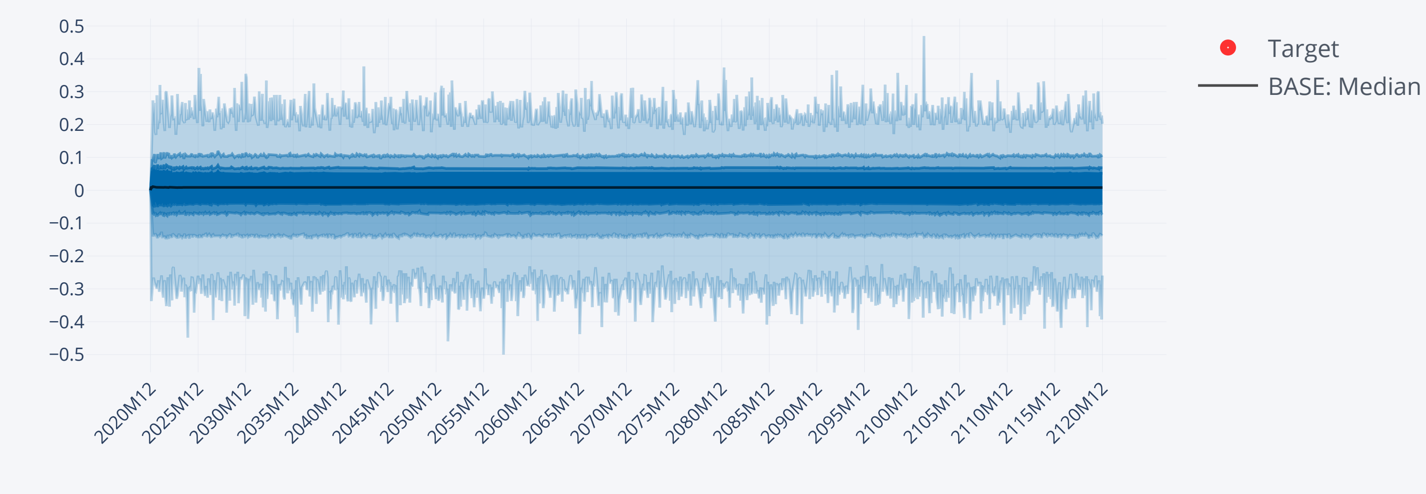
Simulation Summary

	BASE: 2021M12	BASE: 2050M12
mean	0.0012	0.0012
std	0.0002	0.0004
min	0.0006	0.0003
1%	0.0008	0.0005
5%	0.0009	0.0006
10%	0.0010	0.0007
50%	0.0012	0.0011
90%	0.0015	0.0017
95%	0.0016	0.0018
99%	0.0018	0.0022
max	0.0021	0.0028

Cross Sectional Volatility Over Time : BASE



Simulated Data in Percentiles : Large Cap Price

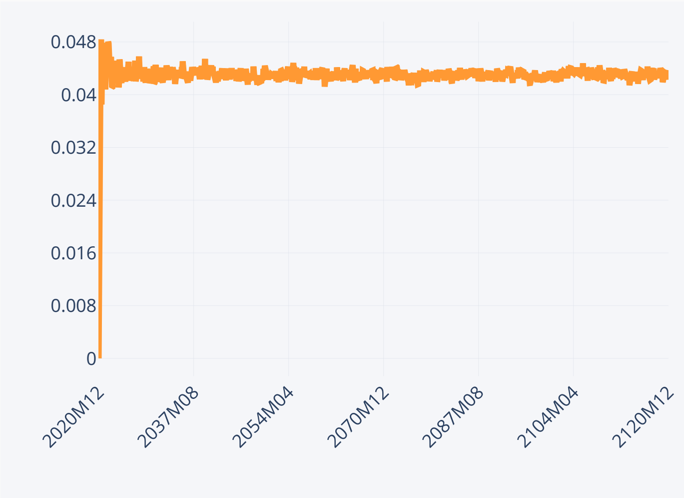


Simulated Data: There are 1200 Time Periods. Percentiles, Mean and Median are calculated across 10000 PATHS.
Percentiles Plotted : Min, 1%, 5%, 10%, 50%, 90%, 95%, 99%, Max
The distributions shown are across the paths for a given time period.

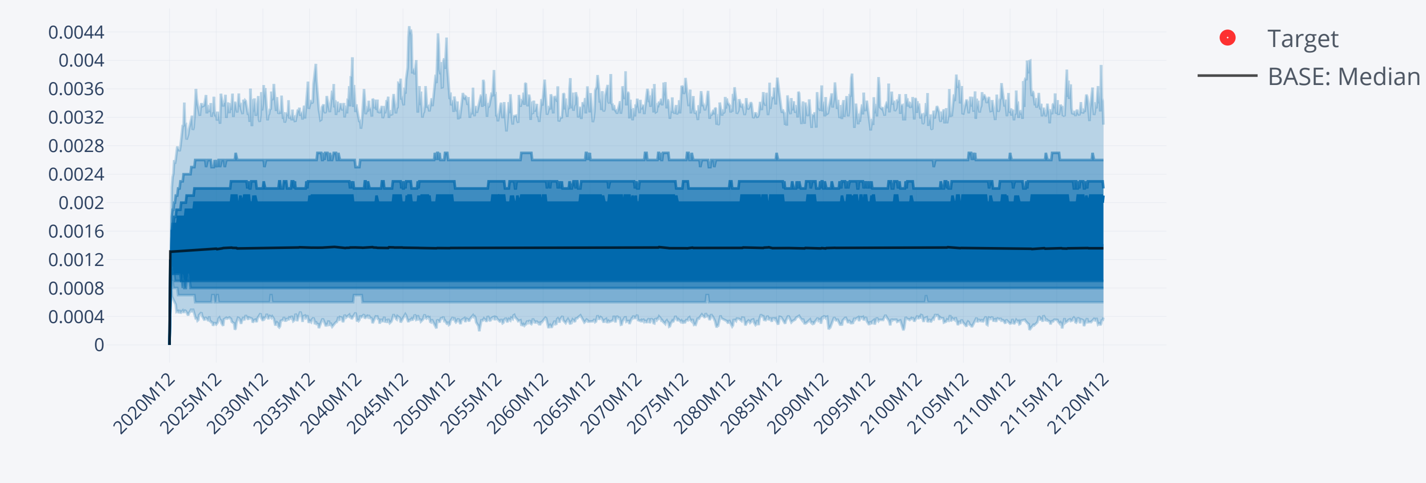
Simulation Summary

	BASE: 2021M12	BASE: 2050M12
mean	0.0066	0.0056
std	0.0444	0.0433
min	-0.2855	-0.3310
1%	-0.1356	-0.1392
5%	-0.0689	-0.0696
10%	-0.0419	-0.0414
50%	0.0089	0.0086
90%	0.0566	0.0514
95%	0.0711	0.0676
99%	0.1060	0.1028
max	0.3205	0.2220

Cross Sectional Volatility Over Time : BASE



Simulated Data in Percentiles : Large Cap Income

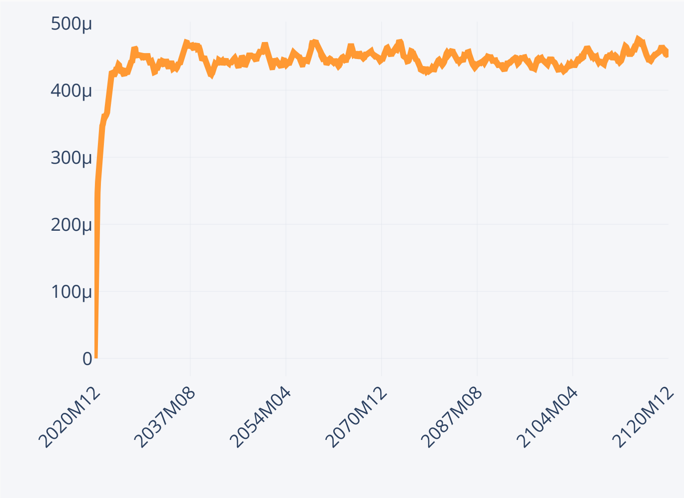


Simulated Data: There are 1200 Time Periods. Percentiles, Mean and Median are calculated across 10000 PATHS.
Percentiles Plotted : Min, 1%, 5%, 10%, 50%, 90%, 95%, 99%, Max
The distributions shown are across the paths for a given time period.

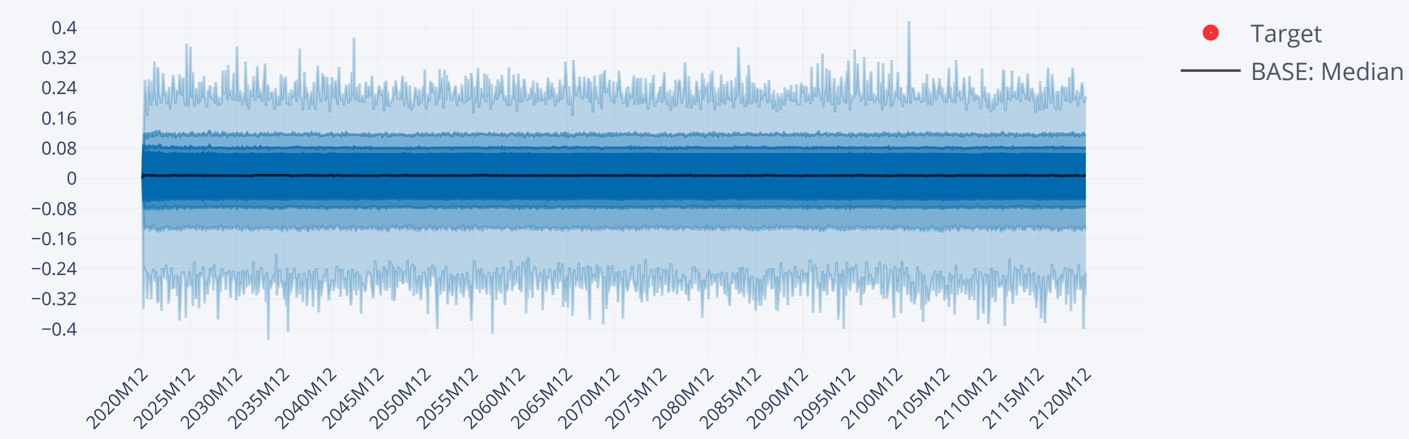
Simulation Summary

	BASE: 2021M12	BASE: 2050M12
mean	0.0013	0.0014
std	0.0003	0.0005
min	0.0004	0.0003
1%	0.0007	0.0006
5%	0.0009	0.0008
10%	0.0010	0.0009
50%	0.0013	0.0014
90%	0.0018	0.0021
95%	0.0019	0.0023
99%	0.0022	0.0026
max	0.0028	0.0035

Cross Sectional Volatility Over Time : BASE



Simulated Data in Percentiles : International Diversified Equity Price

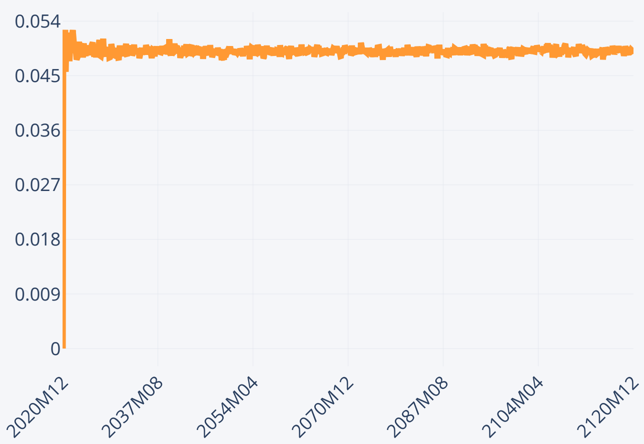


Simulated Data: There are 1200 Time Periods. Percentiles, Mean and Median are calculated across 10000 PATHS.
Percentiles Plotted : Min, 1%, 5%, 10%, 50%, 90%, 95%, 99%, Max
The distributions shown are across the paths for a given time period.

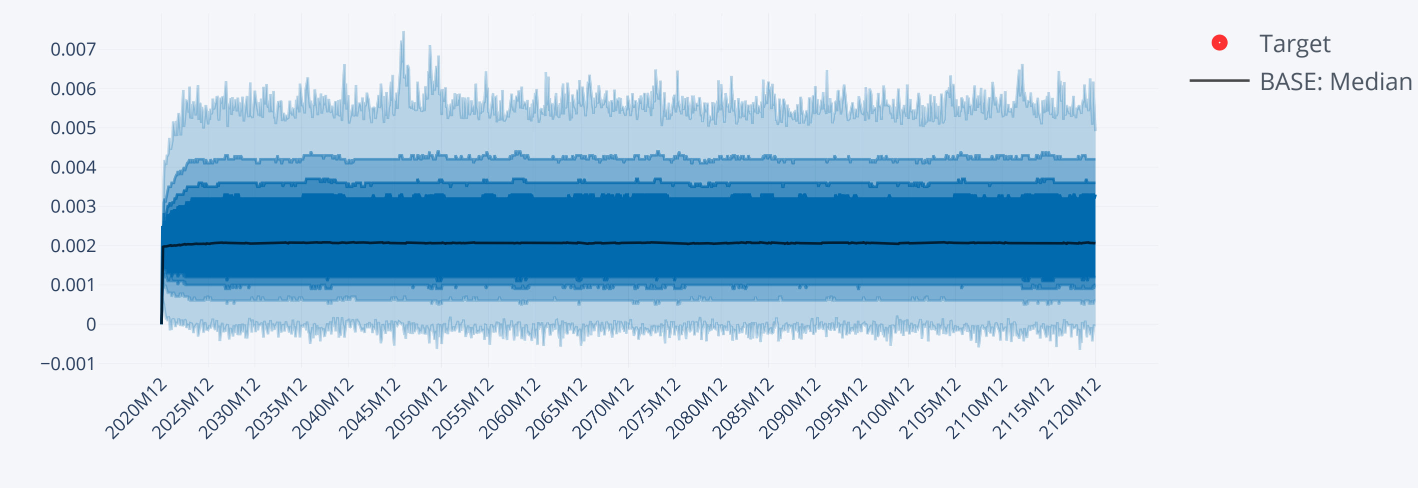
Simulation Summary

	BASE: 2021M12	BASE: 2050M12
mean	0.0063	0.0047
std	0.0500	0.0494
min	-0.2608	-0.2915
1%	-0.1317	-0.1360
5%	-0.0784	-0.0779
10%	-0.0550	-0.0553
50%	0.0084	0.0072
90%	0.0659	0.0634
95%	0.0827	0.0812
99%	0.1181	0.1163
max	0.2585	0.2022

Cross Sectional Volatility Over Time : BASE



Simulated Data in Percentiles : International Diversified Equity Income

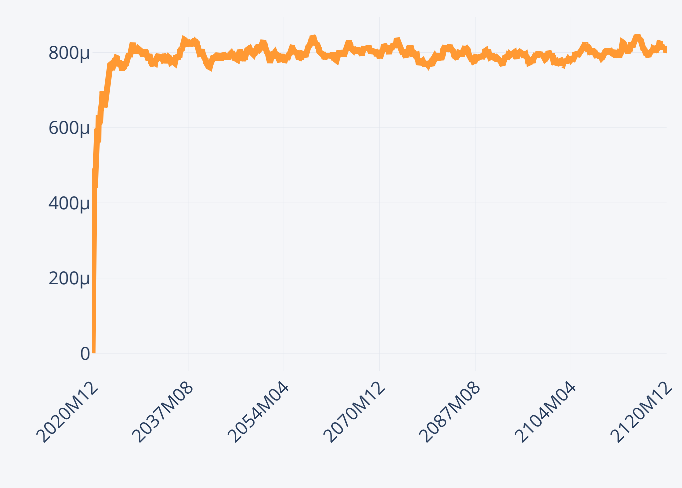


Simulated Data: There are 1200 Time Periods. Percentiles, Mean and Median are calculated across 10000 PATHS.
Percentiles Plotted : Min, 1%, 5%, 10%, 50%, 90%, 95%, 99%, Max
The distributions shown are across the paths for a given time period.

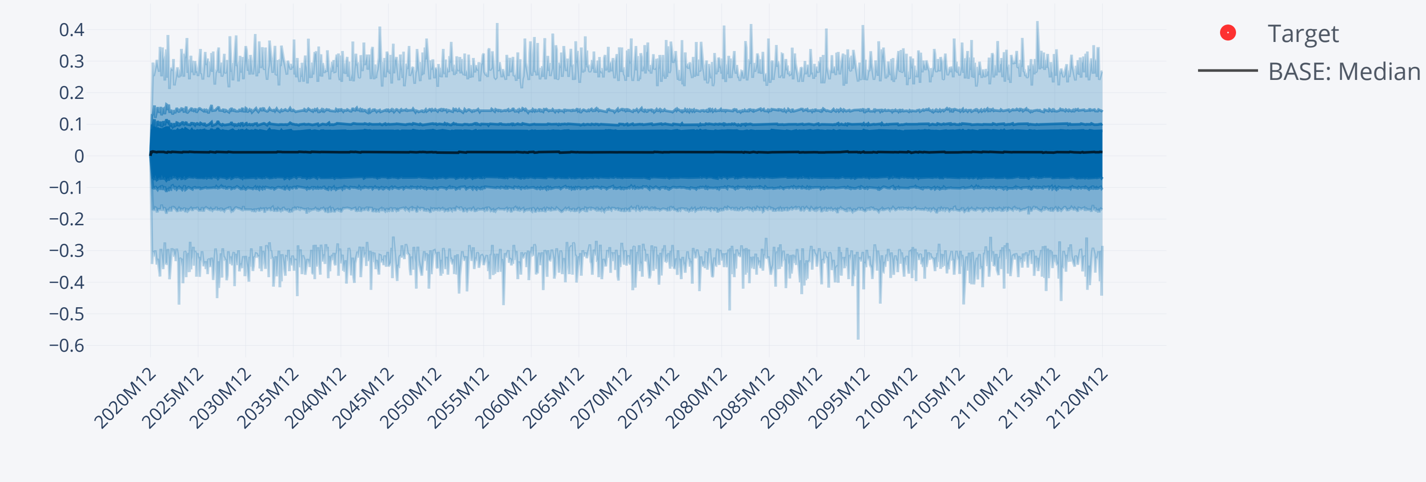
Simulation Summary

	BASE: 2021M12	BASE: 2050M12
mean	0.0020	0.0021
std	0.0006	0.0008
min	0.0001	-0.0005
1%	0.0008	0.0005
5%	0.0012	0.0009
10%	0.0013	0.0012
50%	0.0020	0.0021
90%	0.0028	0.0033
95%	0.0030	0.0037
99%	0.0035	0.0043
max	0.0044	0.0053

Cross Sectional Volatility Over Time : BASE



Simulated Data in Percentiles : Aggressive US Equity Price

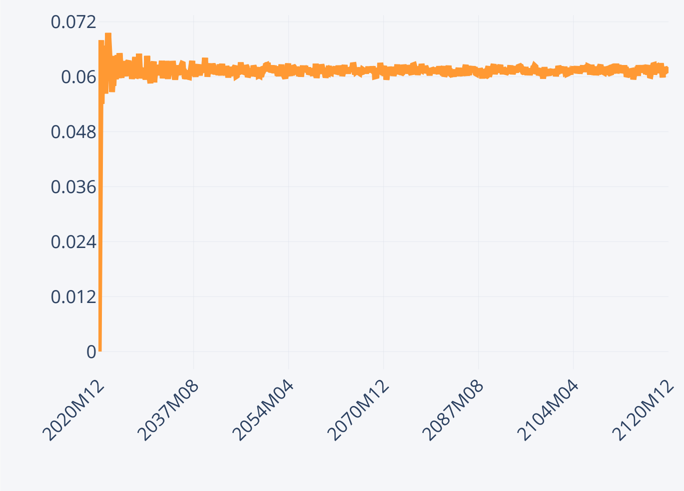


Simulated Data: There are 1200 Time Periods. Percentiles, Mean and Median are calculated across 10000 PATHS.
Percentiles Plotted : Min, 1%, 5%, 10%, 50%, 90%, 95%, 99%, Max
The distributions shown are across the paths for a given time period.

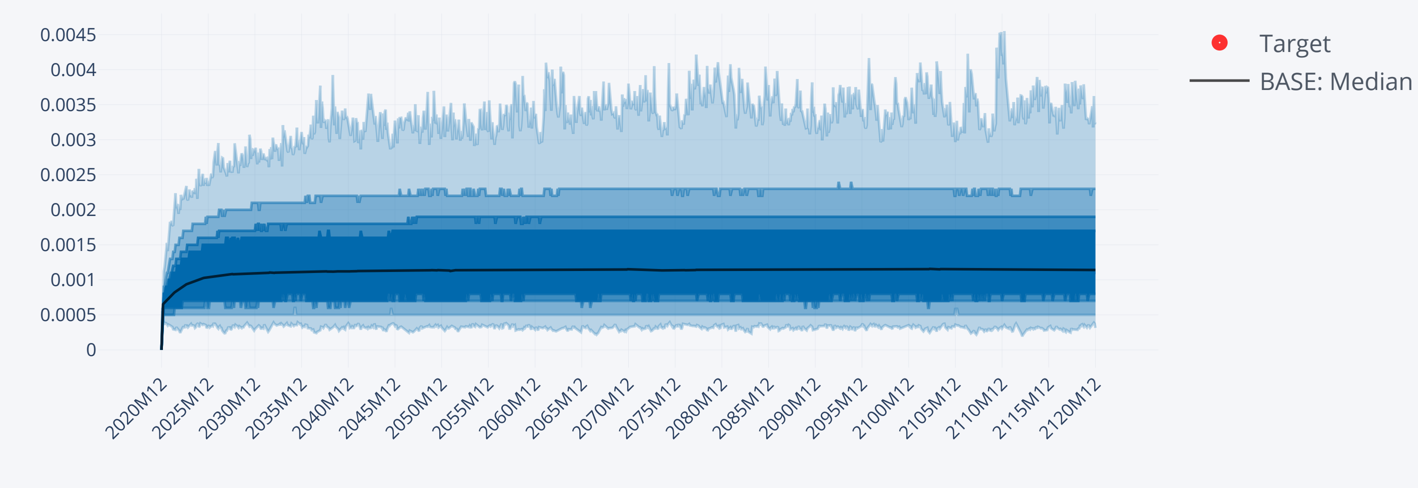
Simulation Summary

	BASE: 2021M12	BASE: 2050M12
mean	0.0081	0.0079
std	0.0622	0.0620
min	-0.3816	-0.3065
1%	-0.1676	-0.1678
5%	-0.0991	-0.1018
10%	-0.0689	-0.0695
50%	0.0115	0.0116
90%	0.0825	0.0799
95%	0.1018	0.1018
99%	0.1414	0.1446
max	0.3450	0.2762

Cross Sectional Volatility Over Time : BASE



Simulated Data in Percentiles : Aggressive US Equity Income

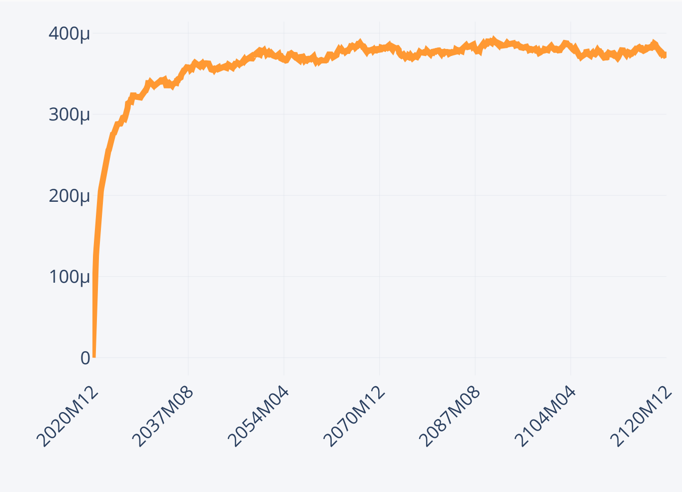


Simulated Data: There are 1200 Time Periods. Percentiles, Mean and Median are calculated across 10000 PATHS.
Percentiles Plotted : Min, 1%, 5%, 10%, 50%, 90%, 95%, 99%, Max
The distributions shown are across the paths for a given time period.

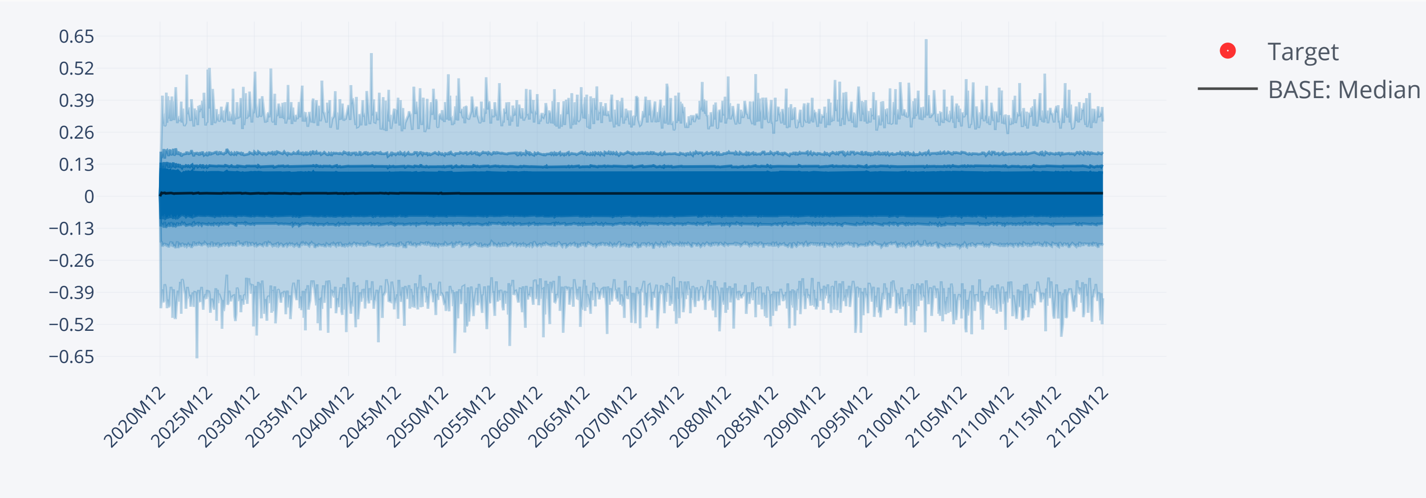
Simulation Summary

	BASE: 2021M12	BASE: 2050M12
mean	0.0008	0.0012
std	0.0002	0.0004
min	0.0003	0.0003
1%	0.0005	0.0005
5%	0.0005	0.0007
10%	0.0006	0.0007
50%	0.0008	0.0011
90%	0.0010	0.0017
95%	0.0011	0.0019
99%	0.0013	0.0023
max	0.0018	0.0031

Cross Sectional Volatility Over Time : BASE



Simulated Data in Percentiles : Aggressive Foreign Equity Price

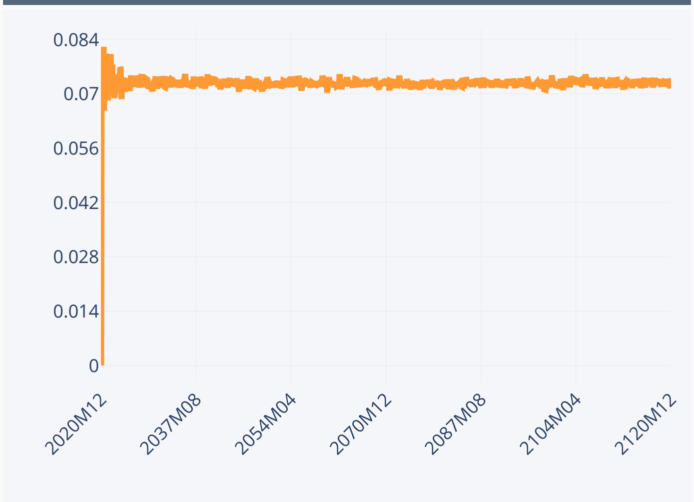


Simulated Data: There are 1200 Time Periods. Percentiles, Mean and Median are calculated across 10000 PATHS.
Percentiles Plotted : Min, 1%, 5%, 10%, 50%, 90%, 95%, 99%, Max
The distributions shown are across the paths for a given time period.

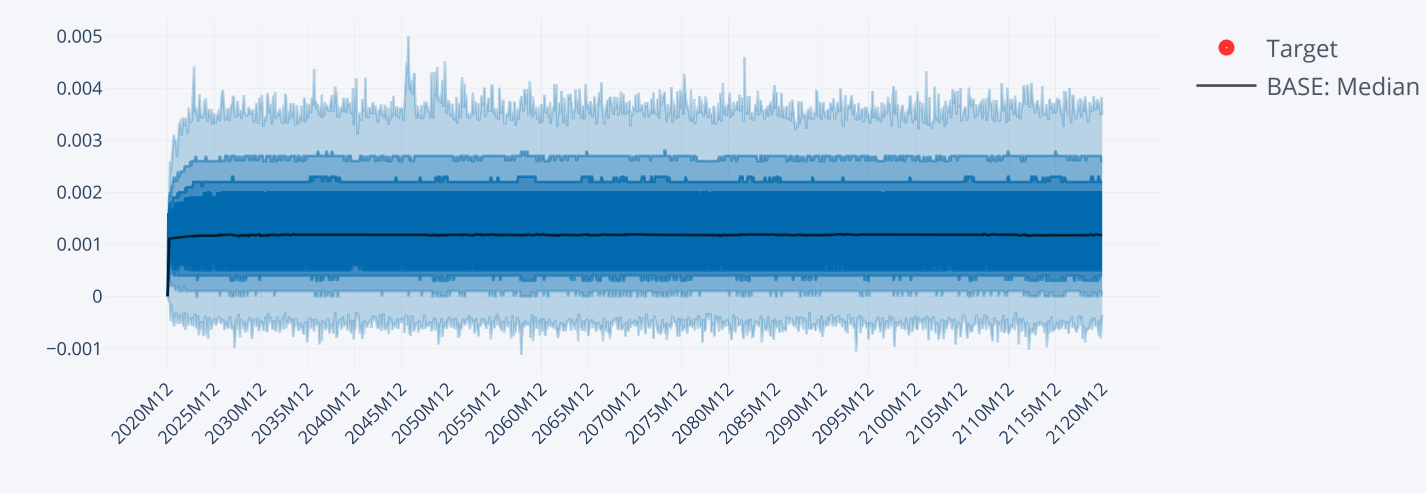
Simulation Summary

	BASE: 2021M12	BASE: 2050M12
mean	0.0113	0.0080
std	0.0767	0.0728
min	-0.4431	-0.4064
1%	-0.1915	-0.2014
5%	-0.1167	-0.1143
10%	-0.0832	-0.0794
50%	0.0135	0.0110
90%	0.1043	0.0943
95%	0.1317	0.1223
99%	0.1836	0.1714
max	0.3429	0.3078

Cross Sectional Volatility Over Time : BASE



Simulated Data in Percentiles : Aggressive Foreign Equity Income

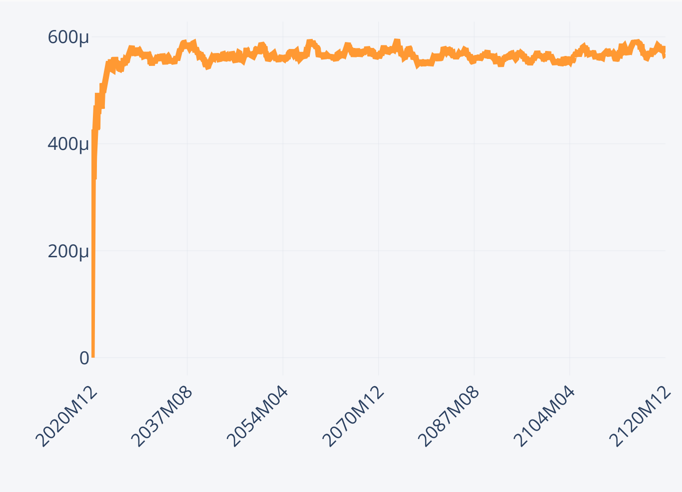


Simulated Data: There are 1200 Time Periods. Percentiles, Mean and Median are calculated across 10000 PATHS.
Percentiles Plotted : Min, 1%, 5%, 10%, 50%, 90%, 95%, 99%, Max
The distributions shown are across the paths for a given time period.

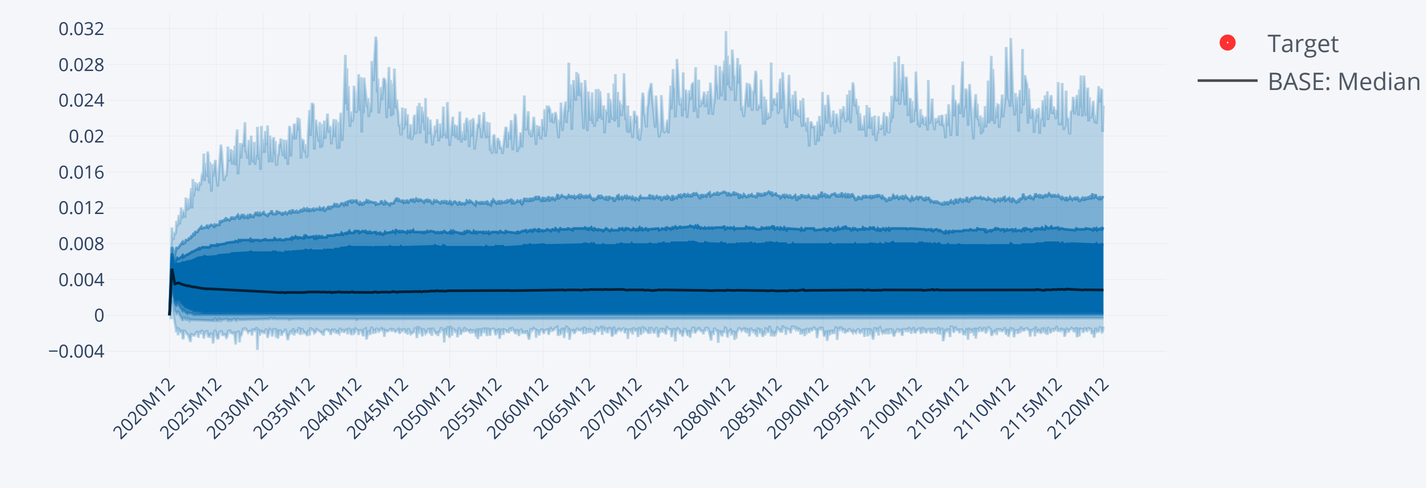
Simulation Summary

	BASE: 2021M12	BASE: 2050M12
mean	0.0012	0.0012
std	0.0004	0.0006
min	-0.0004	-0.0004
1%	0.0002	0.0001
5%	0.0005	0.0004
10%	0.0006	0.0005
50%	0.0011	0.0012
90%	0.0017	0.0020
95%	0.0019	0.0022
99%	0.0022	0.0027
max	0.0027	0.0036

Cross Sectional Volatility Over Time : BASE



Simulated Data in Percentiles : Money Market Total Return

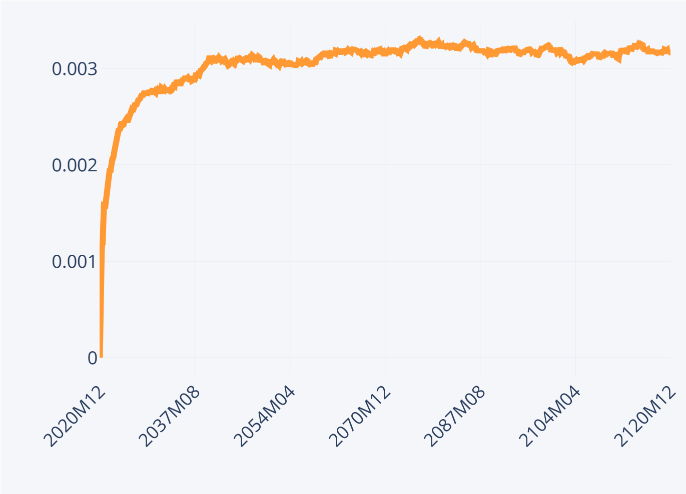


Simulated Data: There are 1200 Time Periods. Percentiles, Mean and Median are calculated across 10000 PATHS.
Percentiles Plotted : Min, 1%, 5%, 10%, 50%, 90%, 95%, 99%, Max
The distributions shown are across the paths for a given time period.

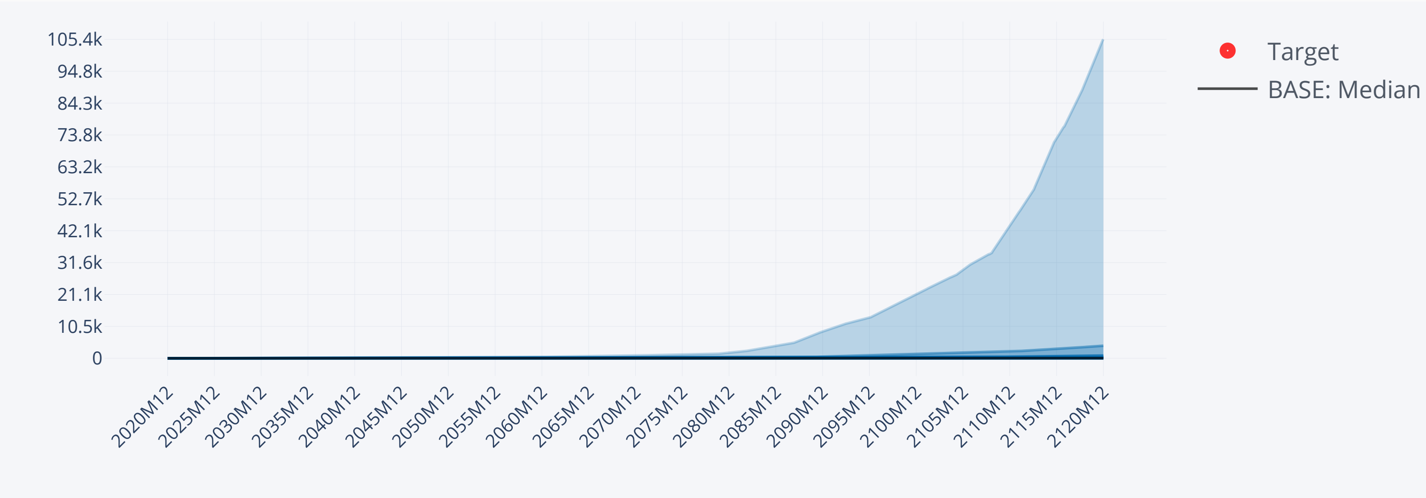
Simulation Summary

	BASE: 2021M12	BASE: 2050M12
mean	0.0037	0.0034
std	0.0016	0.0031
min	-0.0014	-0.0025
1%	0.0002	-0.0003
5%	0.0011	0.0000
10%	0.0017	0.0002
50%	0.0036	0.0027
90%	0.0057	0.0077
95%	0.0063	0.0093
99%	0.0076	0.0127
max	0.0112	0.0189

Cross Sectional Volatility Over Time : BASE



Simulated Data in Percentiles : Money Market Cumulative Return

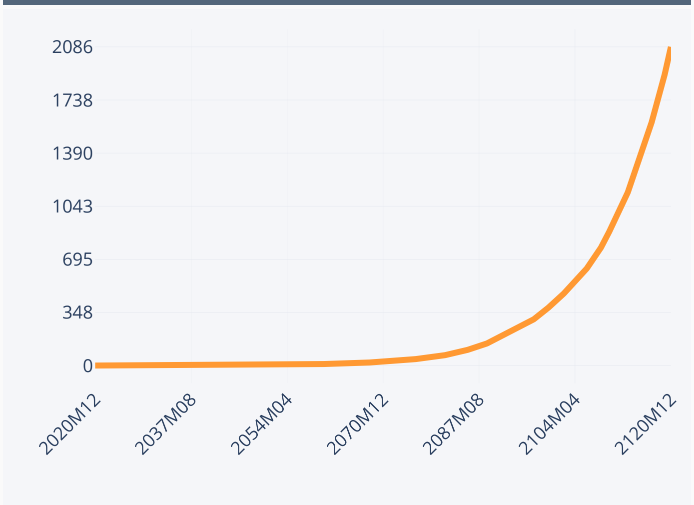


Simulated Data: There are 1200 Time Periods. Percentiles, Mean and Median are calculated across 10000 PATHS.
Percentiles Plotted : Min, 1%, 5%, 10%, 50%, 90%, 95%, 99%, Max
The distributions shown are across the paths for a given time period.

Simulation Summary

	BASE: 2021M12	BASE: 2050M12
mean	0.0470	3.0181
std	0.0070	3.7331
min	0.0227	0.0291
1%	0.0314	0.2554
5%	0.0357	0.4377
10%	0.0379	0.5974
50%	0.0468	1.9314
90%	0.0561	6.4147
95%	0.0589	9.1015
99%	0.0641	17.9618
max	0.0757	108.6290

Cross Sectional Volatility Over Time : BASE



Short Govt Bonds Total Return
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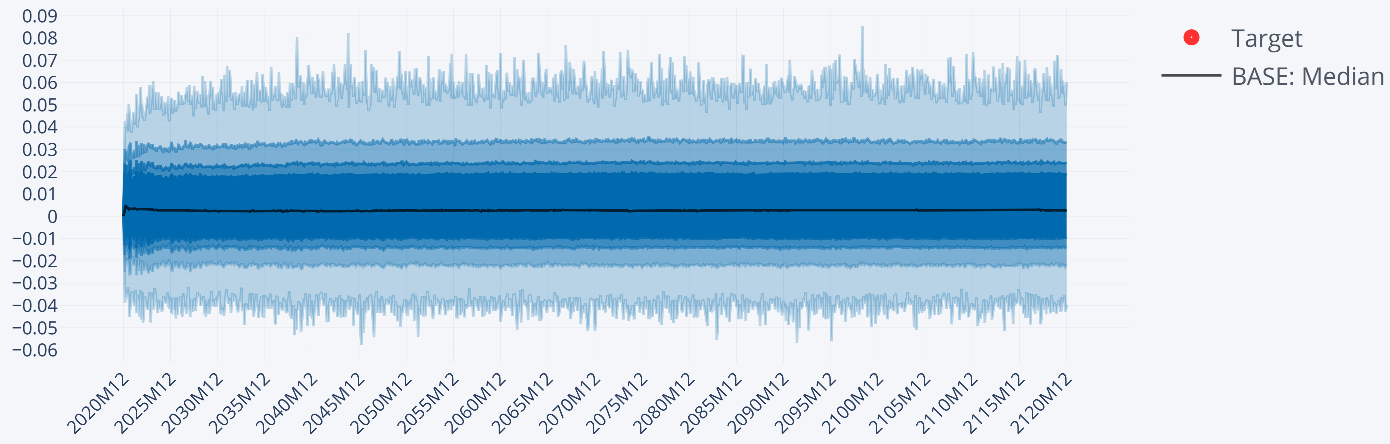
Simulated Data in Percentiles : Short Govt Bonds Total Return

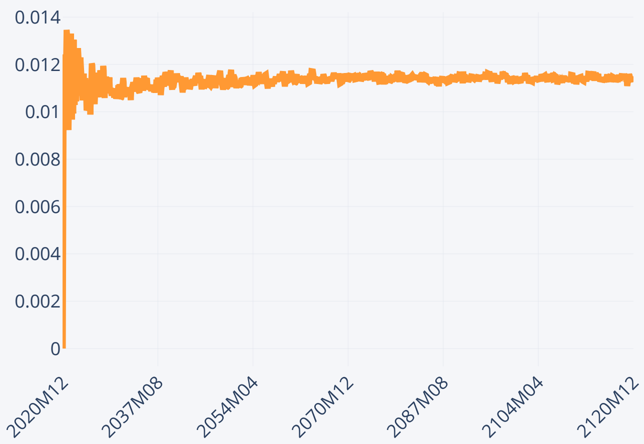


Simulated Data: There are 1200 Time Periods. Percentiles, Mean and Median are calculated across 10000 PATHS.
Percentiles Plotted : Min, 1%, 5%, 10%, 50%, 90%, 95%, 99%, Max
The distributions shown are across the paths for a given time period.

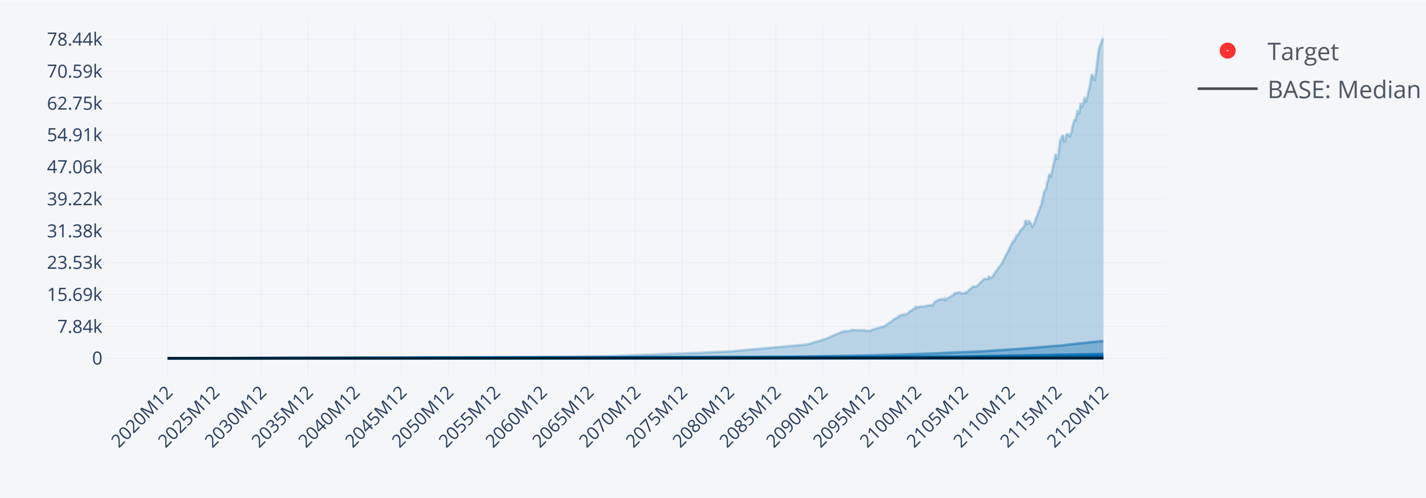
Simulation Summary

	BASE: 2021M12	BASE: 2050M12
mean	0.0033	0.0038
std	0.0092	0.0115
min	-0.0344	-0.0436
1%	-0.0181	-0.0227
5%	-0.0118	-0.0140
10%	-0.0083	-0.0101
50%	0.0033	0.0025
90%	0.0149	0.0190
95%	0.0189	0.0244
99%	0.0258	0.0339
max	0.0428	0.0570

Cross Sectional Volatility Over Time : BASE



Simulated Data in Percentiles : Short Govt Bonds Cumulative Return

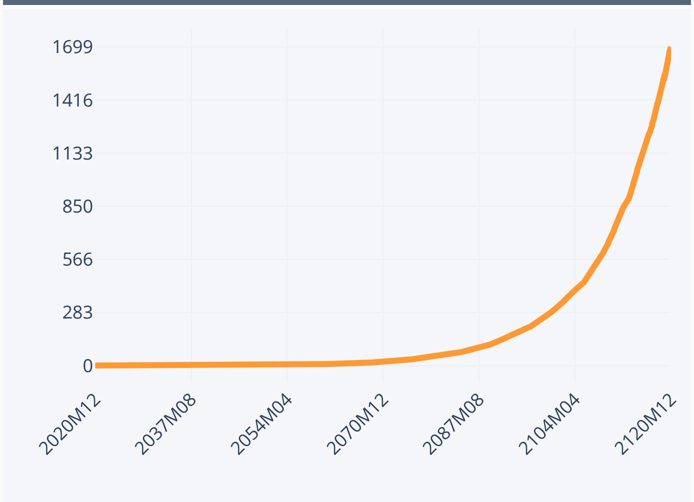


Simulated Data: There are 1200 Time Periods. Percentiles, Mean and Median are calculated across 10000 PATHS.
Percentiles Plotted : Min, 1%, 5%, 10%, 50%, 90%, 95%, 99%, Max
The distributions shown are across the paths for a given time period.

Simulation Summary

	BASE: 2021M12	BASE: 2050M12
mean	0.0413	2.9819
std	0.0307	2.7528
min	-0.0747	0.2002
1%	-0.0311	0.4634
5%	-0.0096	0.6986
10%	0.0018	0.8870
50%	0.0413	2.2301
90%	0.0805	5.7700
95%	0.0919	7.7868
99%	0.1111	13.6506
max	0.1357	62.0546

Cross Sectional Volatility Over Time : BASE



Int Govt Bonds Total Return
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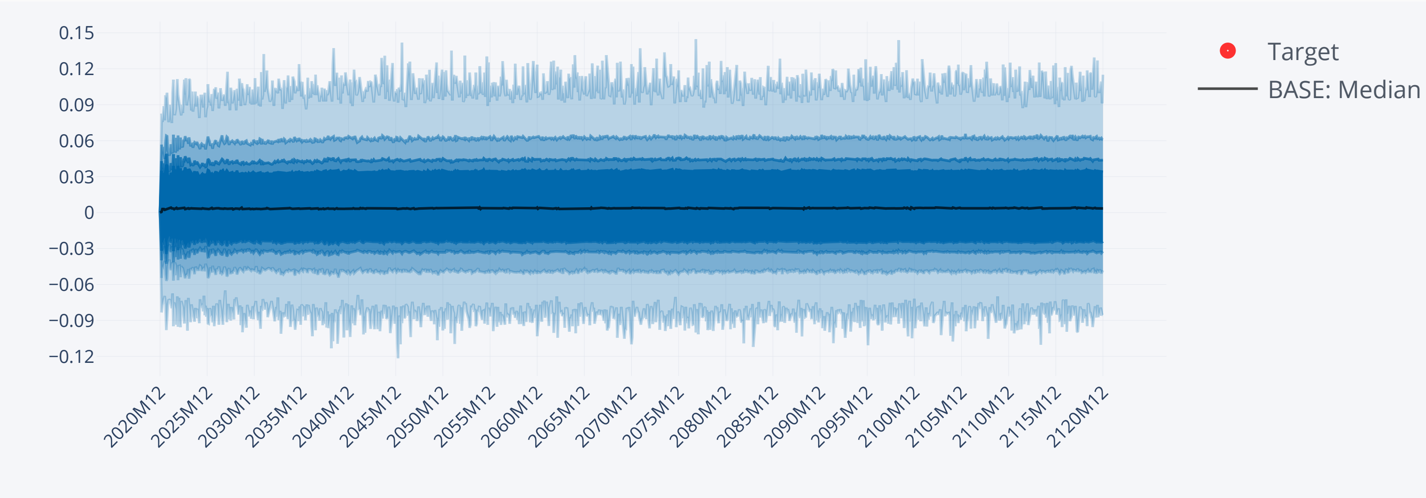
Simulated Data in Percentiles : Int Govt Bonds Total Return

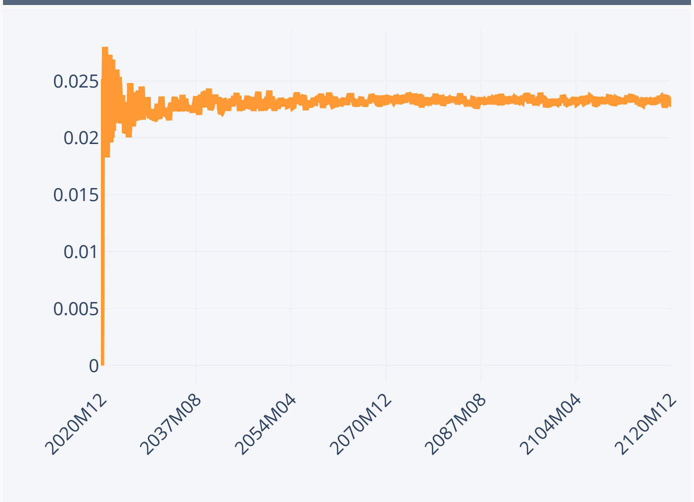


Simulated Data: There are 1200 Time Periods. Percentiles, Mean and Median are calculated across 10000 PATHS.
Percentiles Plotted : Min, 1%, 5%, 10%, 50%, 90%, 95%, 99%, Max
The distributions shown are across the paths for a given time period.

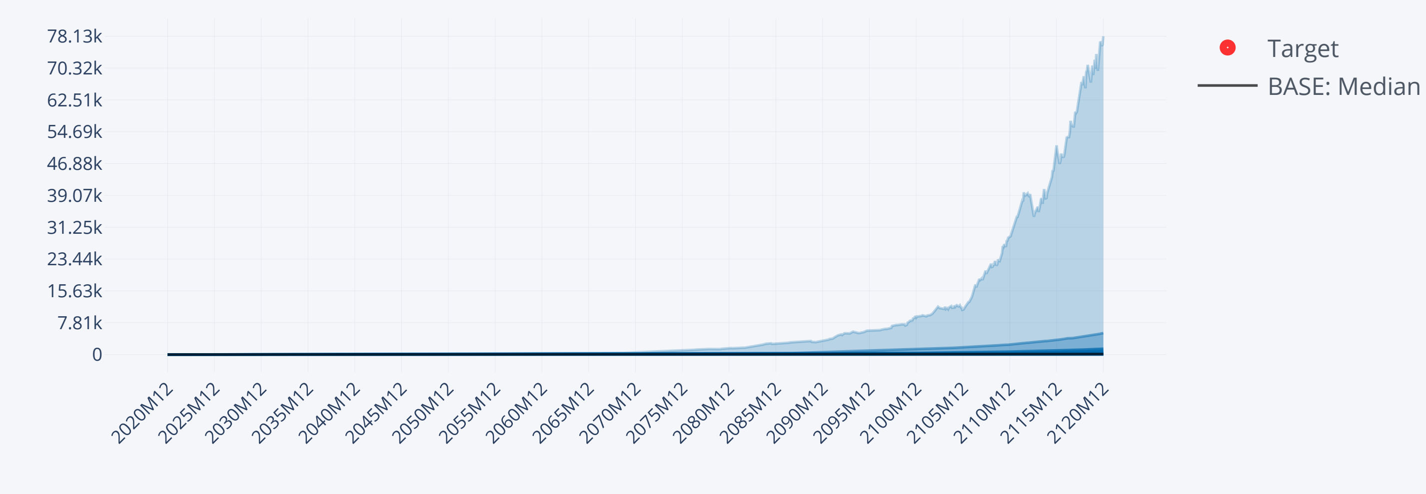
Simulation Summary

	BASE: 2021M12	BASE: 2050M12
mean	0.0033	0.0046
std	0.0183	0.0235
min	-0.0732	-0.0983
1%	-0.0392	-0.0500
5%	-0.0267	-0.0329
10%	-0.0196	-0.0245
50%	0.0033	0.0036
90%	0.0265	0.0351
95%	0.0341	0.0452
99%	0.0475	0.0632
max	0.0830	0.0939

Cross Sectional Volatility Over Time : BASE



Simulated Data in Percentiles : Int Govt Bonds Cumulative Return

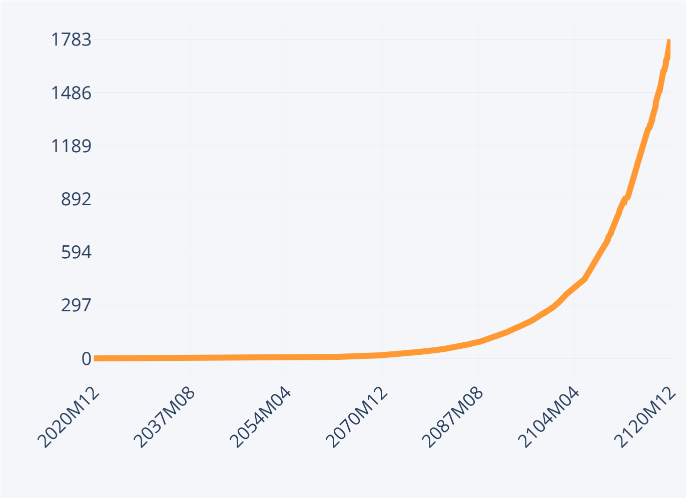


Simulated Data: There are 1200 Time Periods. Percentiles, Mean and Median are calculated across 10000 PATHS.
Percentiles Plotted : Min, 1%, 5%, 10%, 50%, 90%, 95%, 99%, Max
The distributions shown are across the paths for a given time period.

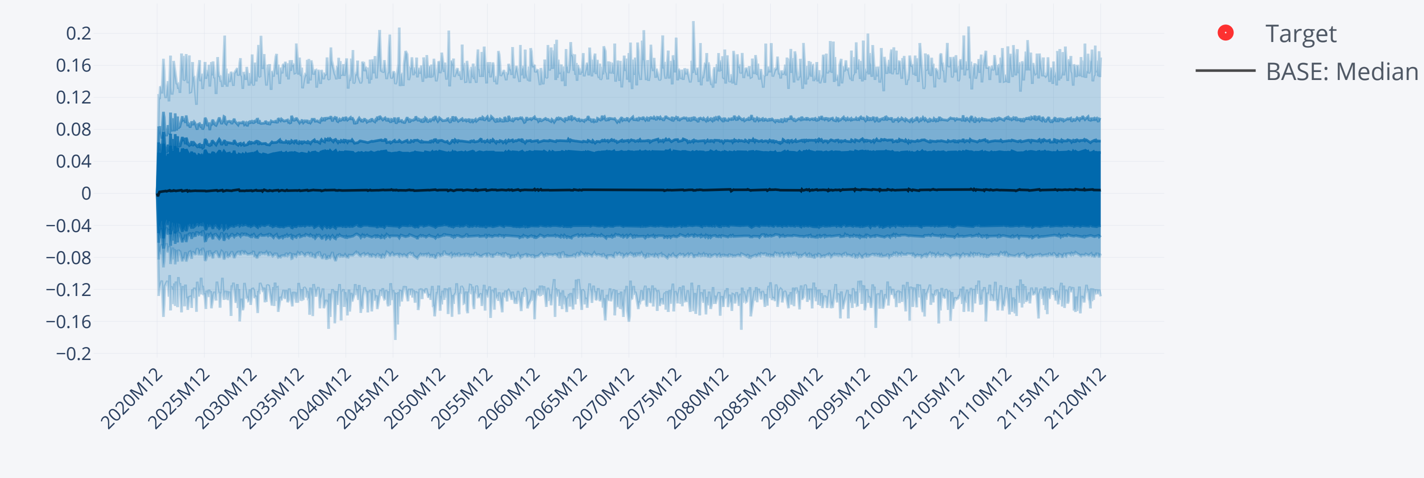
Simulation Summary

	BASE: 2021M12	BASE: 2050M12
mean	0.0307	3.2655
std	0.0693	2.2237
min	-0.2031	0.4488
1%	-0.1260	0.8435
5%	-0.0805	1.1695
10%	-0.0578	1.3880
50%	0.0293	2.6986
90%	0.1190	5.6433
95%	0.1463	7.1243
99%	0.1928	11.7667
max	0.3028	38.0839

Cross Sectional Volatility Over Time : BASE



Simulated Data in Percentiles : Long Govt Bonds Total Return

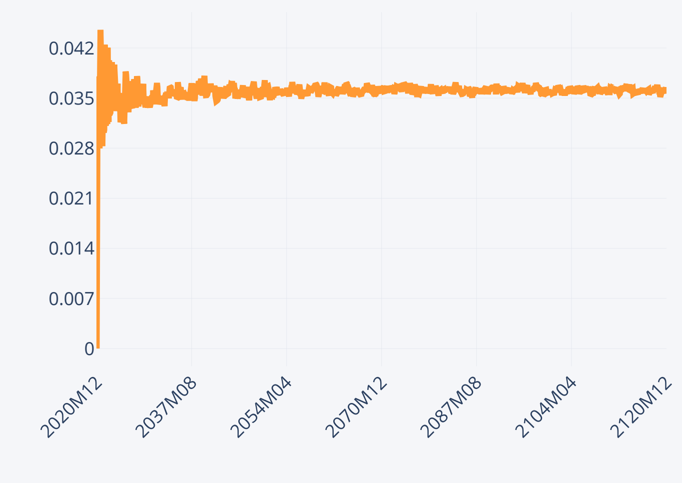


Simulated Data: There are 1200 Time Periods. Percentiles, Mean and Median are calculated across 10000 PATHS.
Percentiles Plotted : Min, 1%, 5%, 10%, 50%, 90%, 95%, 99%, Max
The distributions shown are across the paths for a given time period.

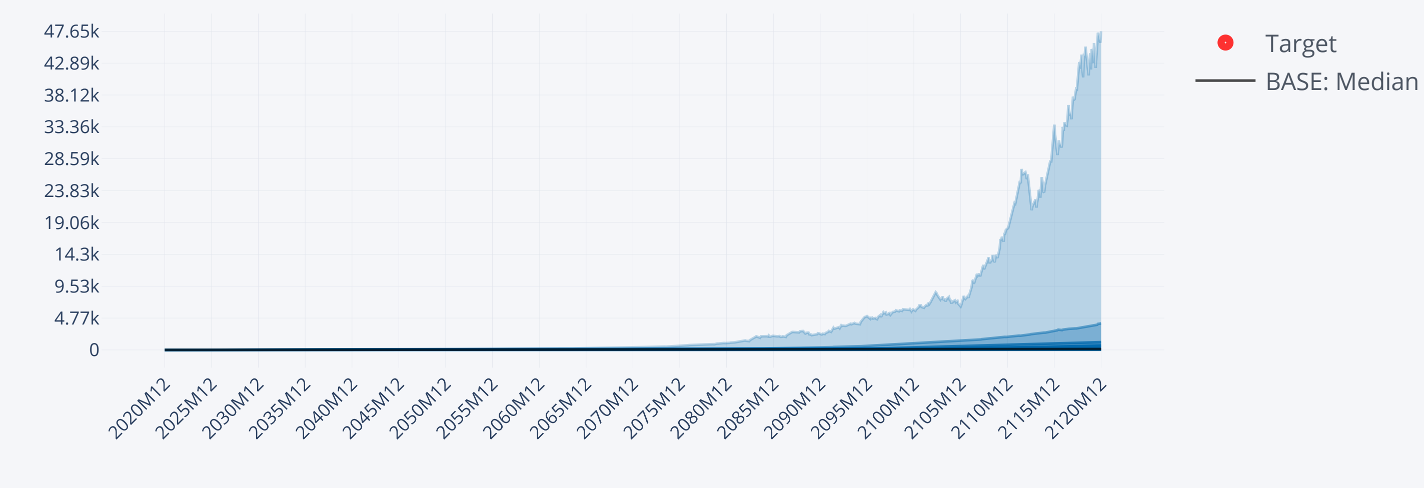
Simulation Summary

	BASE: 2021M12	BASE: 2050M12
mean	0.0030	0.0053
std	0.0283	0.0364
min	-0.1134	-0.1465
1%	-0.0624	-0.0782
5%	-0.0426	-0.0525
10%	-0.0326	-0.0400
50%	0.0026	0.0046
90%	0.0391	0.0525
95%	0.0506	0.0674
99%	0.0716	0.0940
max	0.1284	0.1504

Cross Sectional Volatility Over Time : BASE



Simulated Data in Percentiles : Long Govt Bonds Cumulative Return

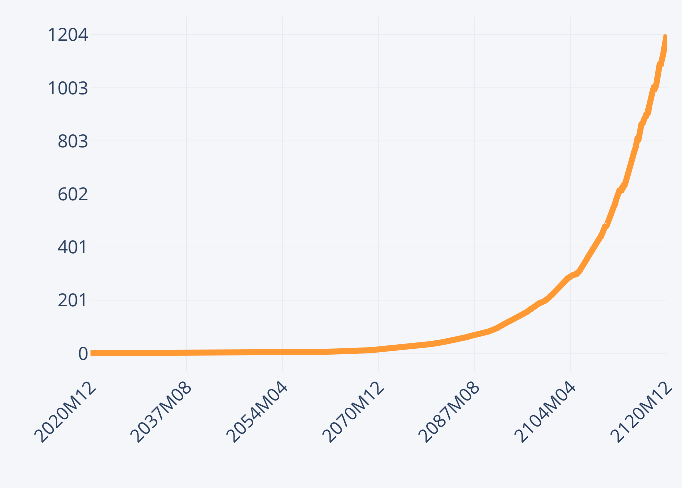


Simulated Data: There are 1200 Time Periods. Percentiles, Mean and Median are calculated across 10000 PATHS.
Percentiles Plotted : Min, 1%, 5%, 10%, 50%, 90%, 95%, 99%, Max
The distributions shown are across the paths for a given time period.

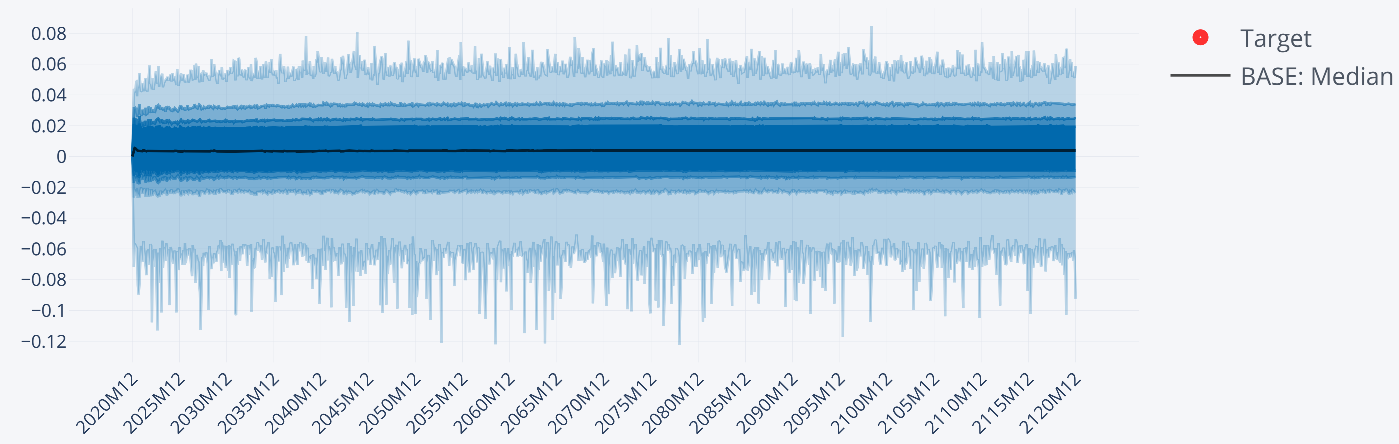
Simulation Summary

	BASE: 2021M12	BASE: 2050M12
mean	0.0231	2.9955
std	0.1103	1.7001
min	-0.2987	0.3685
1%	-0.2129	0.8761
5%	-0.1496	1.2299
10%	-0.1146	1.4572
50%	0.0189	2.6172
90%	0.1667	4.9065
95%	0.2118	6.0110
99%	0.2962	9.1525
max	0.5566	26.3334

Cross Sectional Volatility Over Time : BASE



Simulated Data in Percentiles : Short Inv Corp Bonds Total Return

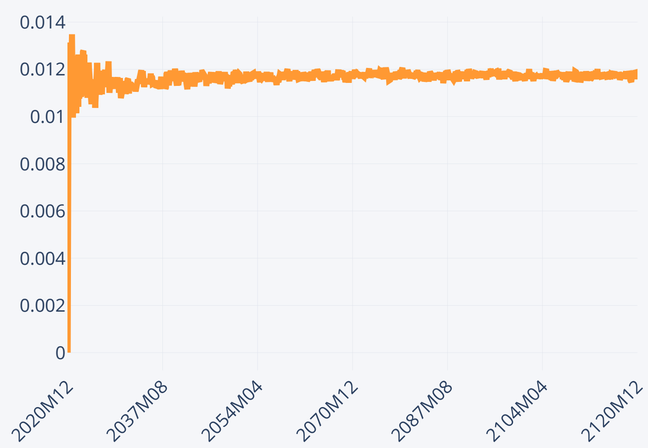


Simulated Data: There are 1200 Time Periods. Percentiles, Mean and Median are calculated across 10000 PATHS.
Percentiles Plotted : Min, 1%, 5%, 10%, 50%, 90%, 95%, 99%, Max
The distributions shown are across the paths for a given time period.

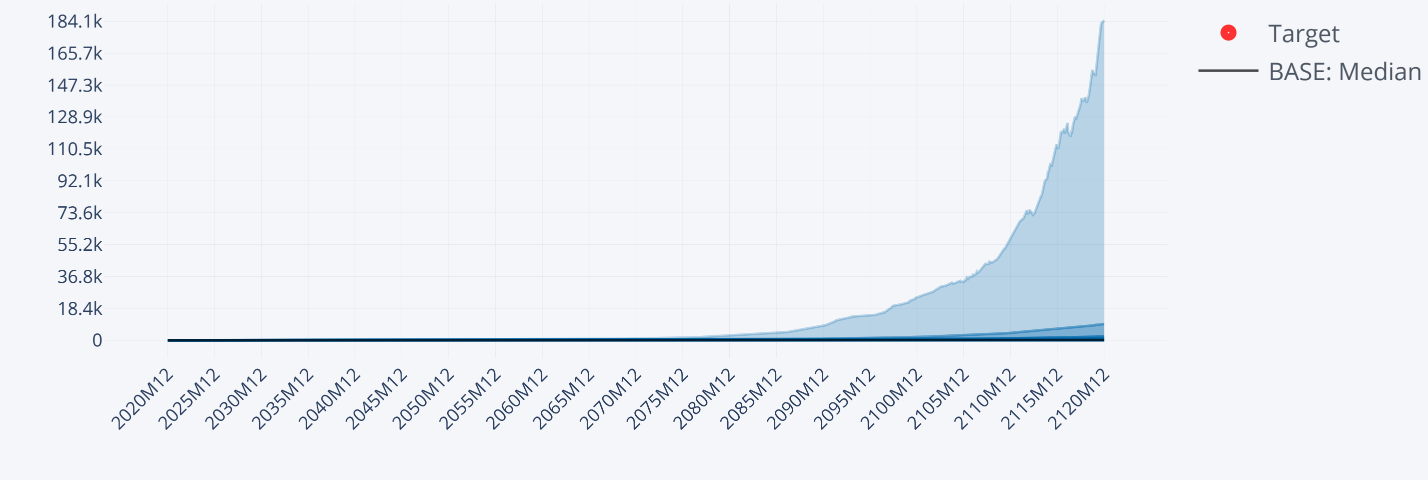
Simulation Summary

	BASE: 2021M12	BASE: 2050M12
mean	0.0036	0.0044
std	0.0101	0.0118
min	-0.0648	-0.1023
1%	-0.0212	-0.0232
5%	-0.0123	-0.0137
10%	-0.0086	-0.0094
50%	0.0035	0.0037
90%	0.0160	0.0196
95%	0.0200	0.0247
99%	0.0272	0.0342
max	0.0428	0.0569

Cross Sectional Volatility Over Time : BASE



Simulated Data in Percentiles : Short Inv Corp Bonds Cumulative Return

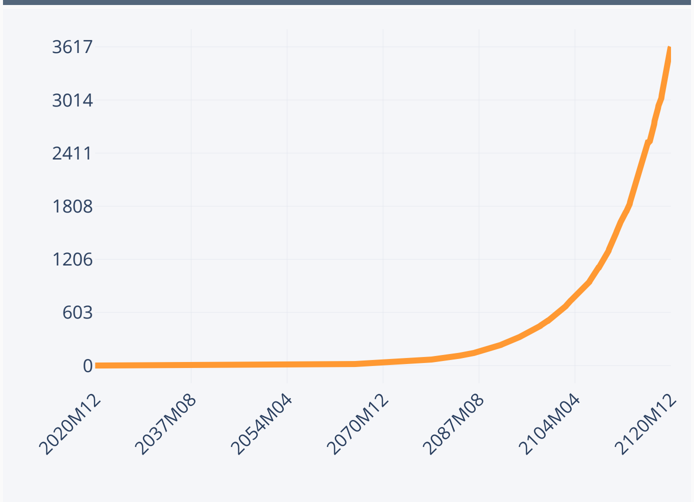


Simulated Data: There are 1200 Time Periods. Percentiles, Mean and Median are calculated across 10000 PATHS.
Percentiles Plotted : Min, 1%, 5%, 10%, 50%, 90%, 95%, 99%, Max
The distributions shown are across the paths for a given time period.

Simulation Summary

	BASE: 2021M12	BASE: 2050M12
mean	0.0476	3.8670
std	0.0324	3.3734
min	-0.0918	0.4674
1%	-0.0304	0.7777
5%	-0.0070	1.0681
10%	0.0058	1.2953
50%	0.0480	2.9669
90%	0.0882	7.3090
95%	0.1000	9.7419
99%	0.1201	16.8263
max	0.1504	77.9009

Cross Sectional Volatility Over Time : BASE



Int Inv Corp Bonds Total Return
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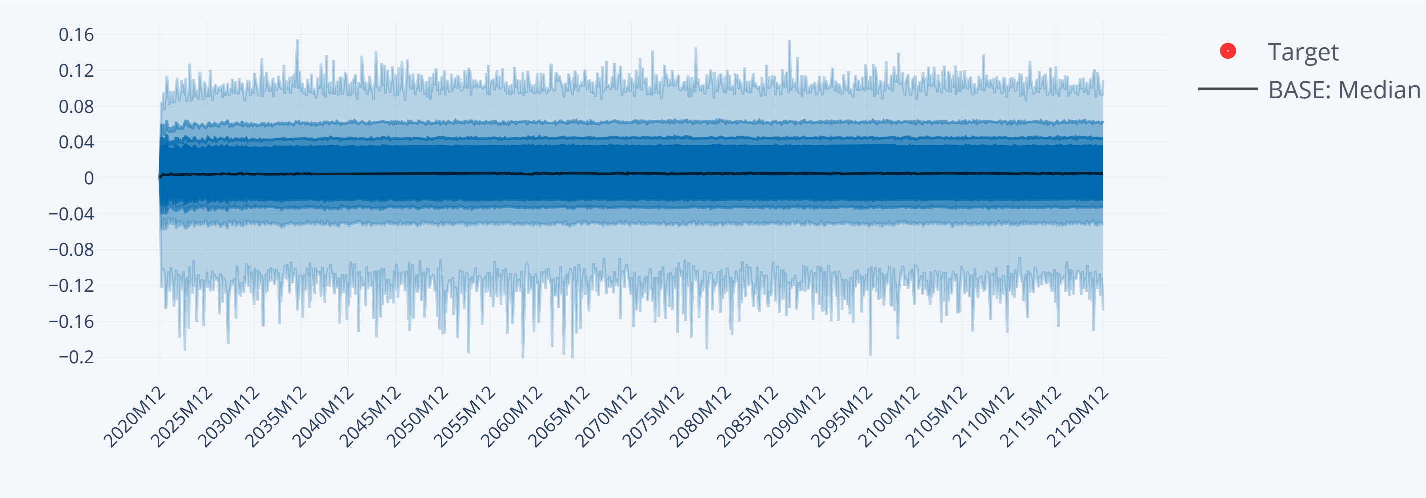
Simulated Data in Percentiles : Int Inv Corp Bonds Total Return

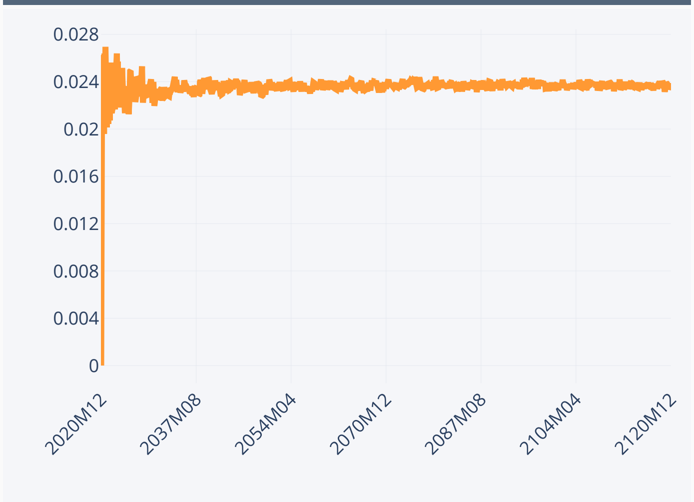


Simulated Data: There are 1200 Time Periods. Percentiles, Mean and Median are calculated across 10000 PATHS.
Percentiles Plotted : Min, 1%, 5%, 10%, 50%, 90%, 95%, 99%, Max
The distributions shown are across the paths for a given time period.

Simulation Summary

	BASE: 2021M12	BASE: 2050M12
mean	0.0034	0.0052
std	0.0201	0.0239
min	-0.1203	-0.1743
1%	-0.0452	-0.0517
5%	-0.0285	-0.0326
10%	-0.0216	-0.0240
50%	0.0033	0.0047
90%	0.0288	0.0357
95%	0.0365	0.0452
99%	0.0507	0.0624
max	0.0812	0.0978

Cross Sectional Volatility Over Time : BASE



Int Inv Corp Bonds Cumulative Return

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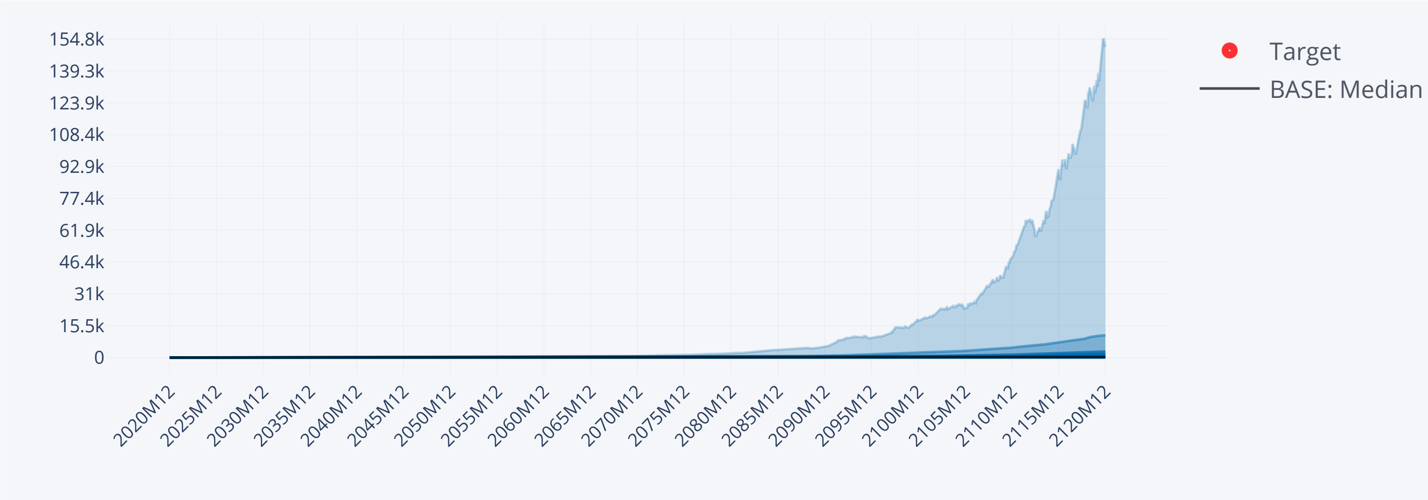
Simulated Data in Percentiles : Int Inv Corp Bonds Cumulative Return

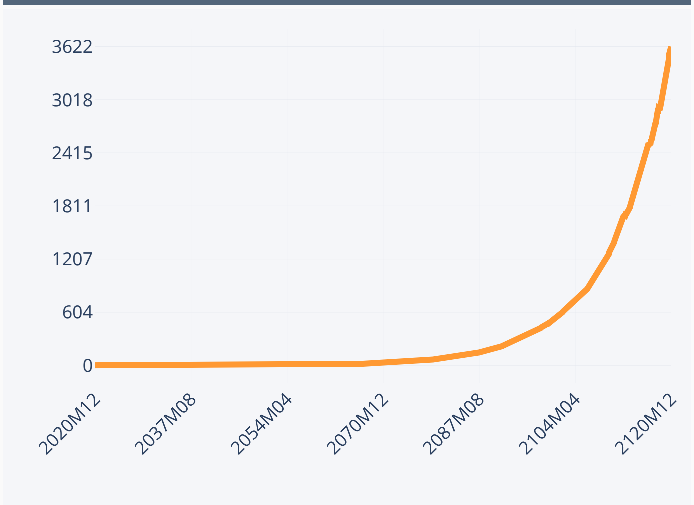


Simulated Data: There are 1200 Time Periods. Percentiles, Mean and Median are calculated across 10000 PATHS.
Percentiles Plotted : Min, 1%, 5%, 10%, 50%, 90%, 95%, 99%, Max
The distributions shown are across the paths for a given time period.

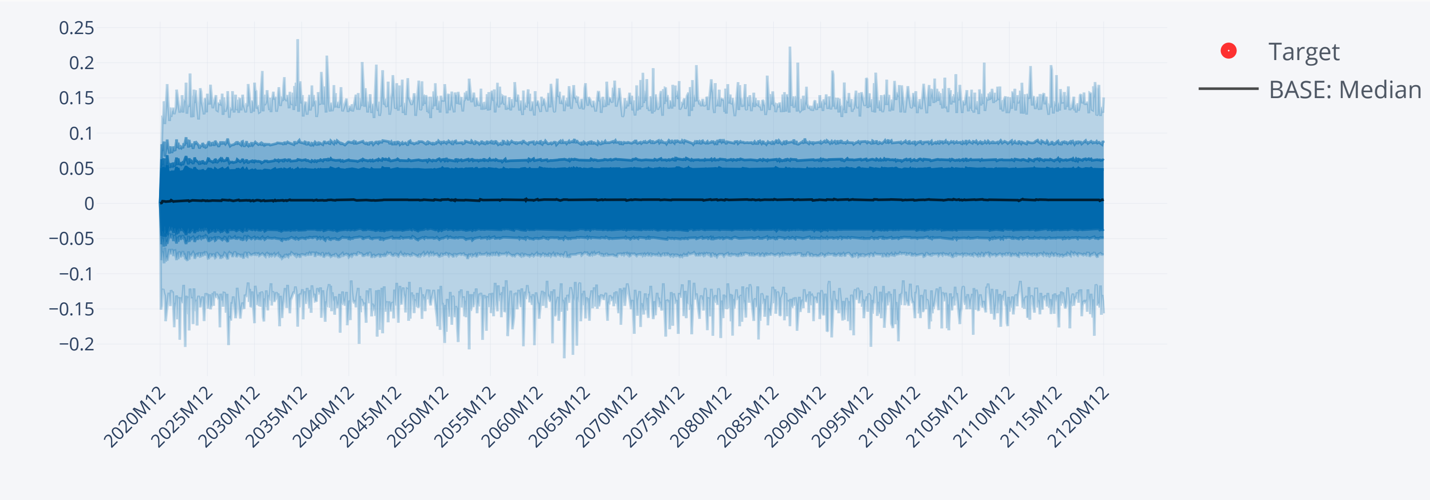
Simulation Summary

	BASE: 2021M12	BASE: 2050M12
mean	0.0364	4.1500
std	0.0722	2.7141
min	-0.2462	0.5960
1%	-0.1324	1.1335
5%	-0.0810	1.5682
10%	-0.0563	1.8569
50%	0.0354	3.4783
90%	0.1288	7.0613
95%	0.1566	8.9320
99%	0.2049	14.5213
max	0.3312	48.0739

Cross Sectional Volatility Over Time : BASE



Simulated Data in Percentiles : Long Inv Corp Bonds Total Return

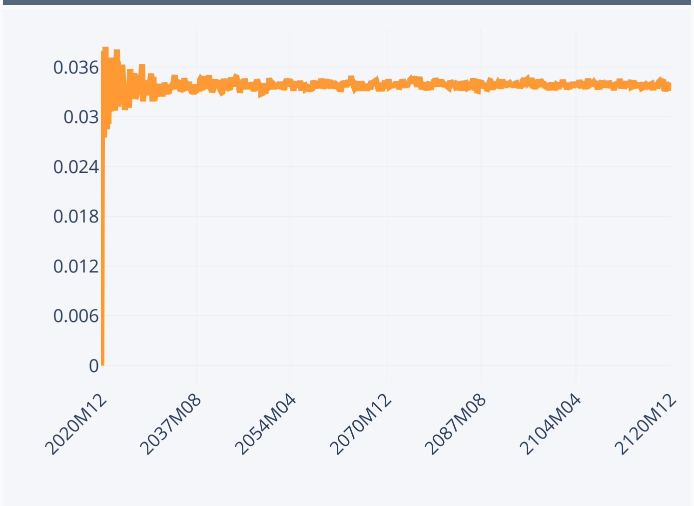


Simulated Data: There are 1200 Time Periods. Percentiles, Mean and Median are calculated across 10000 PATHS.
Percentiles Plotted : Min, 1%, 5%, 10%, 50%, 90%, 95%, 99%, Max
The distributions shown are across the paths for a given time period.

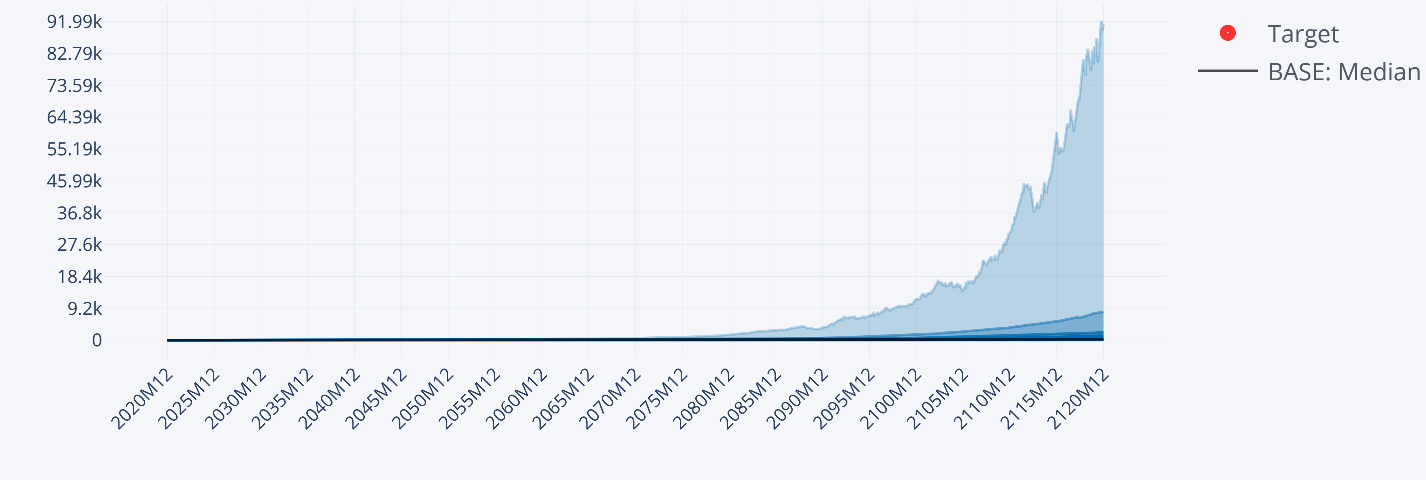
Simulation Summary

	BASE: 2021M12	BASE: 2050M12
mean	0.0031	0.0056
std	0.0285	0.0340
min	-0.1365	-0.1925
1%	-0.0649	-0.0732
5%	-0.0428	-0.0495
10%	-0.0324	-0.0370
50%	0.0029	0.0050
90%	0.0397	0.0496
95%	0.0504	0.0620
99%	0.0710	0.0869
max	0.1173	0.1463

Cross Sectional Volatility Over Time : BASE



Simulated Data in Percentiles : Long Inv Corp Bonds Cumulative Return

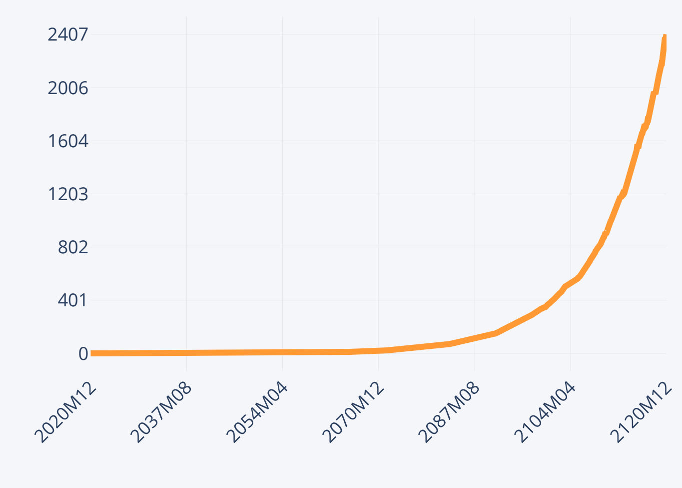


Simulated Data: There are 1200 Time Periods. Percentiles, Mean and Median are calculated across 10000 PATHS.
Percentiles Plotted : Min, 1%, 5%, 10%, 50%, 90%, 95%, 99%, Max
The distributions shown are across the paths for a given time period.

Simulation Summary

	BASE: 2021M12	BASE: 2050M12
mean	0.0281	3.7953
std	0.1060	2.1032
min	-0.3593	0.4938
1%	-0.2056	1.1775
5%	-0.1399	1.6400
10%	-0.1056	1.9198
50%	0.0249	3.3098
90%	0.1655	6.1436
95%	0.2068	7.5834
99%	0.2893	11.6131
max	0.5611	32.7934

Cross Sectional Volatility Over Time : BASE



High Yield Corp Bonds Total Return
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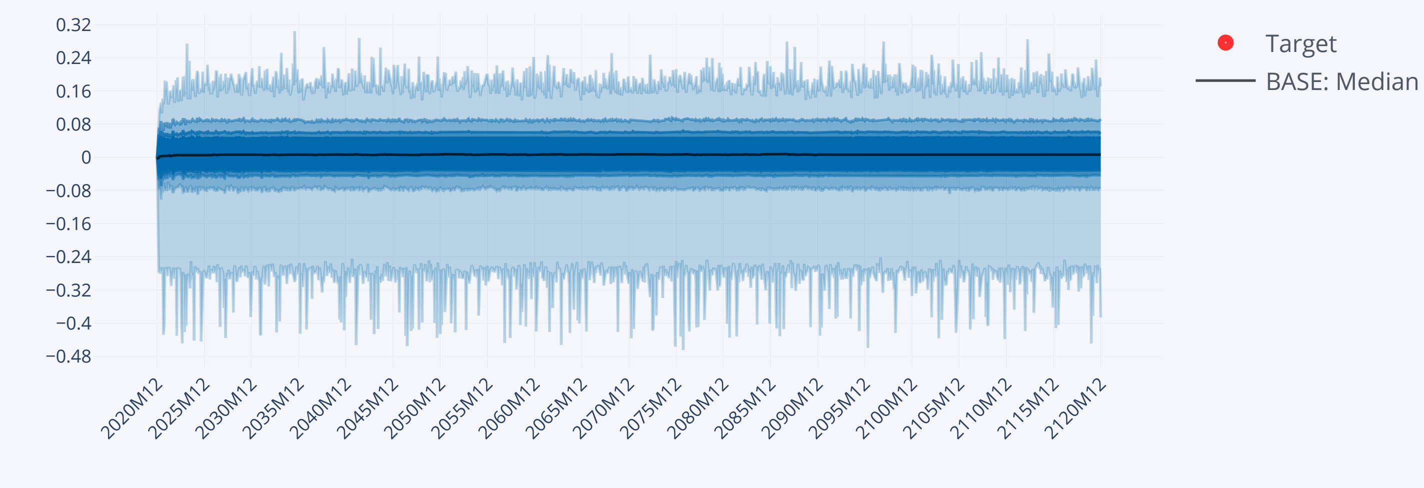
Simulated Data in Percentiles : High Yield Corp Bonds Total Return

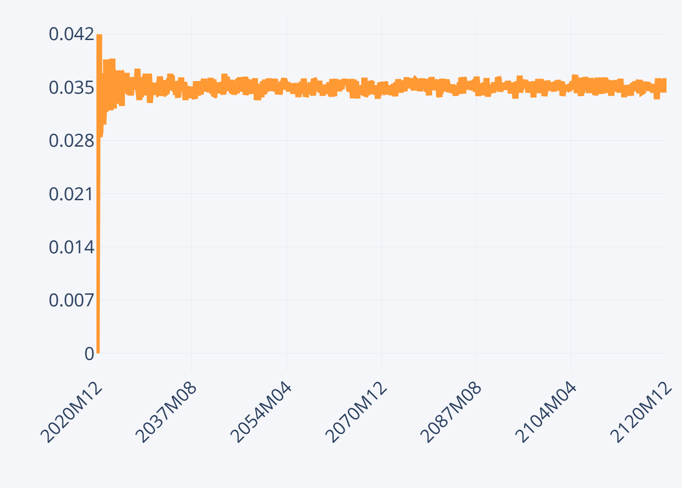


Simulated Data: There are 1200 Time Periods. Percentiles, Mean and Median are calculated across 10000 PATHS.
Percentiles Plotted : Min, 1%, 5%, 10%, 50%, 90%, 95%, 99%, Max
The distributions shown are across the paths for a given time period.

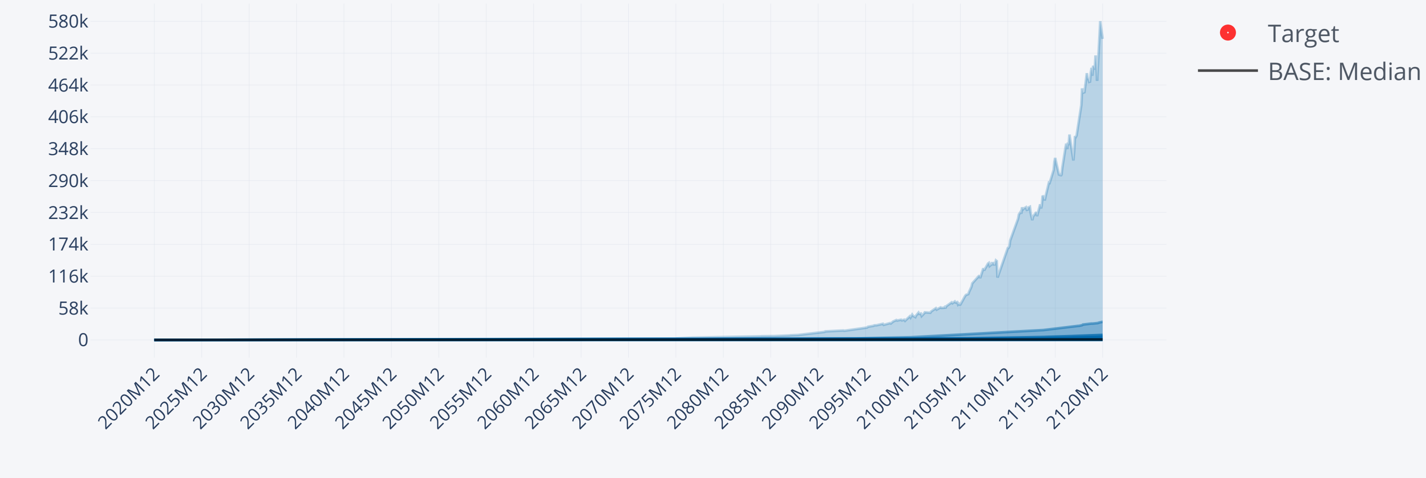
Simulation Summary

	BASE: 2021M12	BASE: 2050M12
mean	0.0032	0.0064
std	0.0333	0.0352
min	-0.2721	-0.4259
1%	-0.0699	-0.0733
5%	-0.0434	-0.0445
10%	-0.0321	-0.0322
50%	0.0037	0.0064
90%	0.0407	0.0475
95%	0.0530	0.0610
99%	0.0782	0.0882
max	0.1824	0.1603

Cross Sectional Volatility Over Time : BASE



Simulated Data in Percentiles : High Yield Corp Bonds Cumulative Return

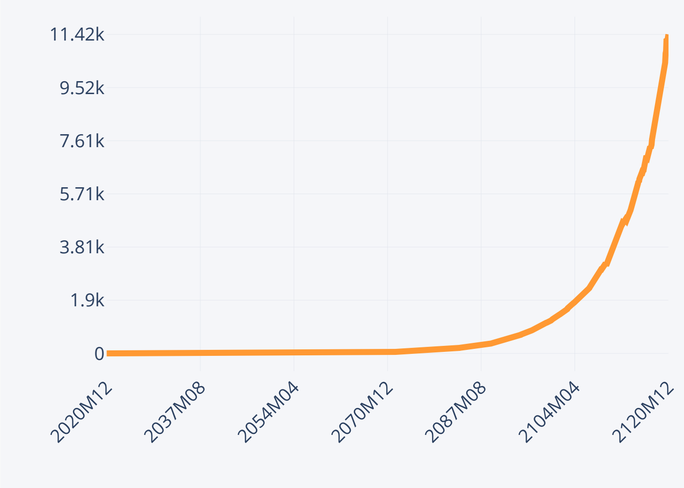


Simulated Data: There are 1200 Time Periods. Percentiles, Mean and Median are calculated across 10000 PATHS.
Percentiles Plotted : Min, 1%, 5%, 10%, 50%, 90%, 95%, 99%, Max
The distributions shown are across the paths for a given time period.

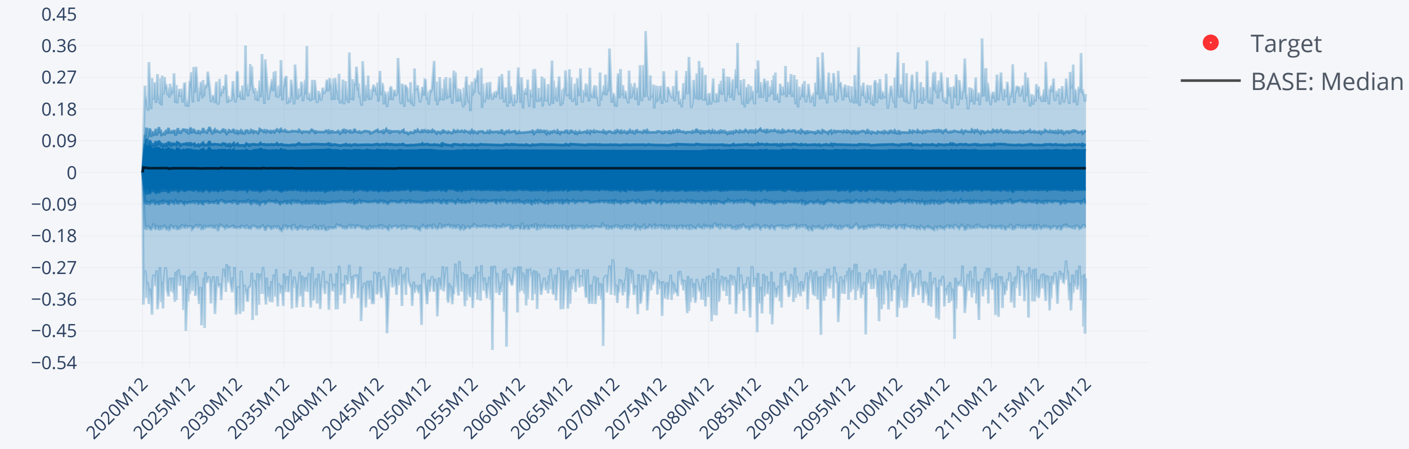
Simulation Summary

	BASE: 2021M12	BASE: 2050M12
mean	0.0093	6.0021
std	0.0899	4.0242
min	-0.4169	0.3774
1%	-0.2240	1.4996
5%	-0.1487	2.1769
10%	-0.1072	2.5717
50%	0.0149	4.9592
90%	0.1200	10.5637
95%	0.1467	13.2260
99%	0.2005	20.7163
max	0.3345	78.1029

Cross Sectional Volatility Over Time : BASE



Simulated Data in Percentiles : Small Cap Total Return

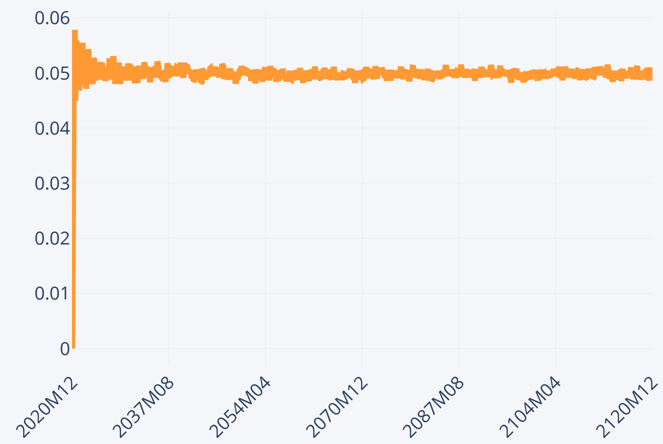


Simulated Data: There are 1200 Time Periods. Percentiles, Mean and Median are calculated across 10000 PATHS.
Percentiles Plotted : Min, 1%, 5%, 10%, 50%, 90%, 95%, 99%, Max
The distributions shown are across the paths for a given time period.

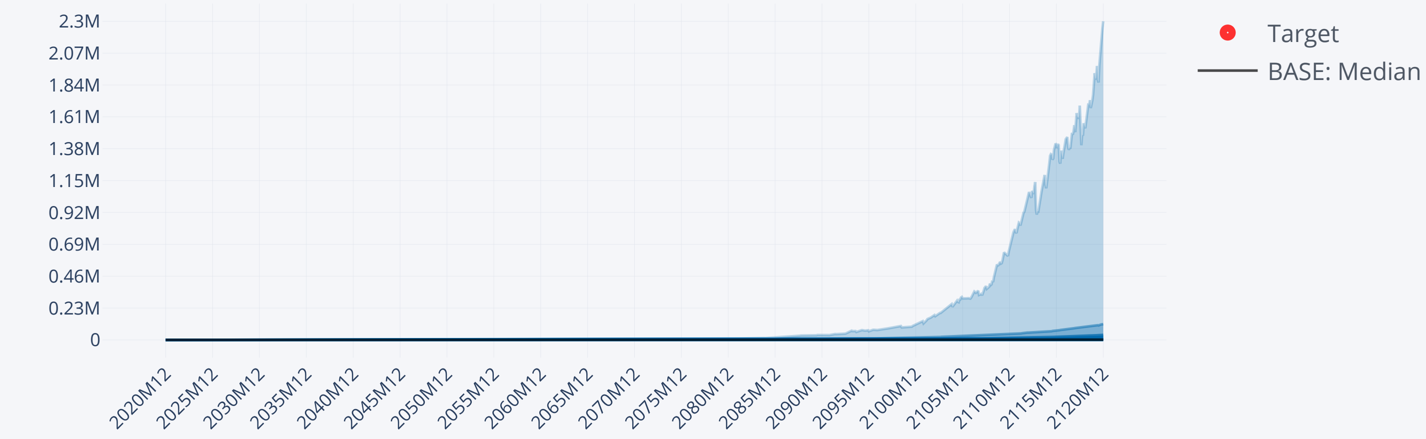
Simulation Summary

	BASE: 2021M12	BASE: 2050M12
mean	0.0084	0.0077
std	0.0494	0.0507
min	-0.4037	-0.3286
1%	-0.1543	-0.1574
5%	-0.0790	-0.0842
10%	-0.0473	-0.0502
50%	0.0122	0.0118
90%	0.0636	0.0627
95%	0.0782	0.0802
99%	0.1117	0.1149
max	0.2679	0.2625

Cross Sectional Volatility Over Time : BASE



Simulated Data in Percentiles : Small Cap Cumulative Return

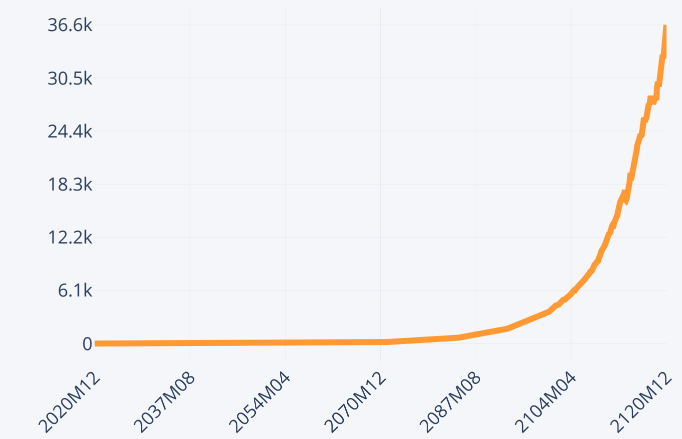


Simulated Data: There are 1200 Time Periods. Percentiles, Mean and Median are calculated across 10000 PATHS.
Percentiles Plotted : Min, 1%, 5%, 10%, 50%, 90%, 95%, 99%, Max
The distributions shown are across the paths for a given time period.

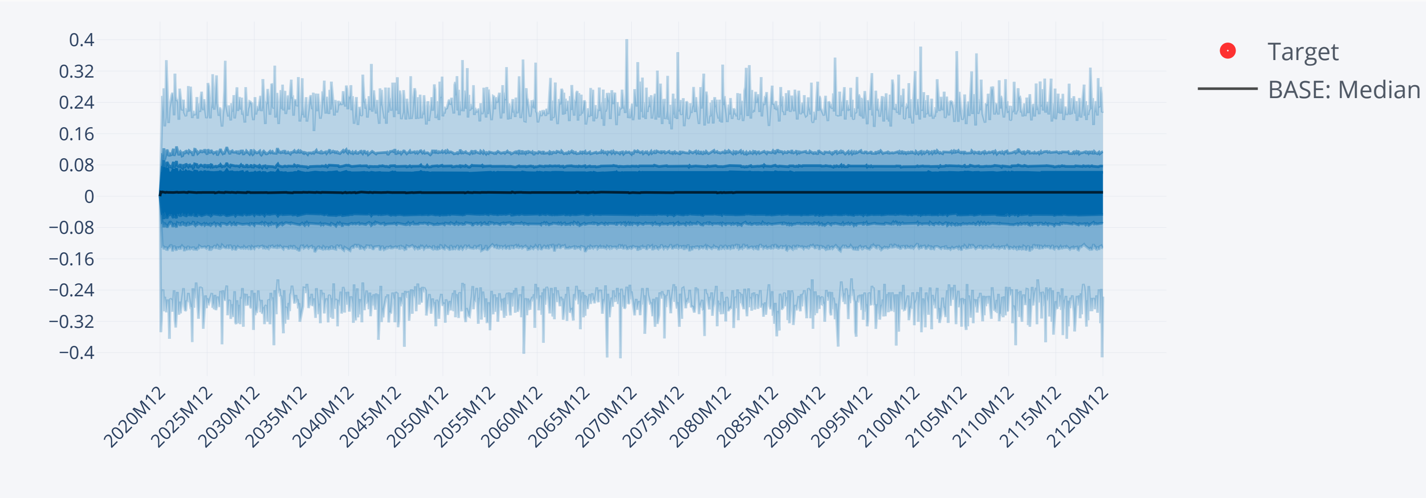
Simulation Summary

	BASE: 2021M12	BASE: 2050M12
mean	0.1002	13.9421
std	0.1895	15.2631
min	-0.5459	-0.9319
1%	-0.3366	-0.2754
5%	-0.2112	0.6657
10%	-0.1502	1.6251
50%	0.1047	9.2212
90%	0.3381	31.4805
95%	0.4076	42.4138
99%	0.5425	75.1611
max	0.8385	182.6257

Cross Sectional Volatility Over Time : BASE



Simulated Data in Percentiles : Mid Cap Total Return

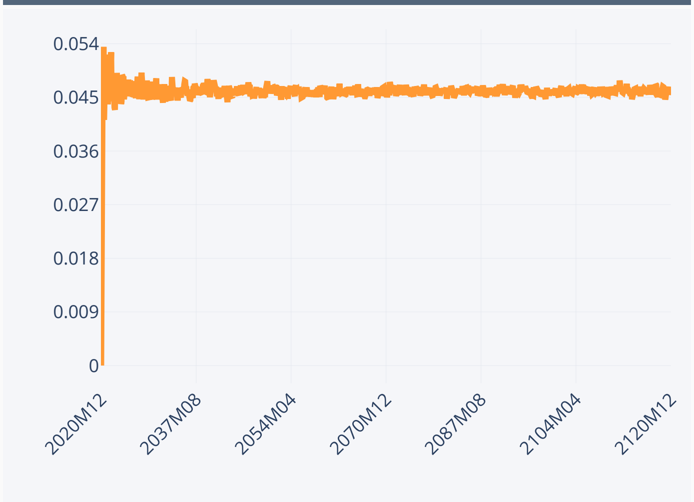


Simulated Data: There are 1200 Time Periods. Percentiles, Mean and Median are calculated across 10000 PATHS.
Percentiles Plotted : Min, 1%, 5%, 10%, 50%, 90%, 95%, 99%, Max
The distributions shown are across the paths for a given time period.

Simulation Summary

	BASE: 2021M12	BASE: 2050M12
mean	0.0074	0.0074
std	0.0445	0.0464
min	-0.3644	-0.2802
1%	-0.1292	-0.1320
5%	-0.0681	-0.0705
10%	-0.0452	-0.0480
50%	0.0098	0.0097
90%	0.0590	0.0607
95%	0.0730	0.0769
99%	0.1058	0.1120
max	0.2252	0.2044

Cross Sectional Volatility Over Time : BASE



Mid Cap Cumulative Return

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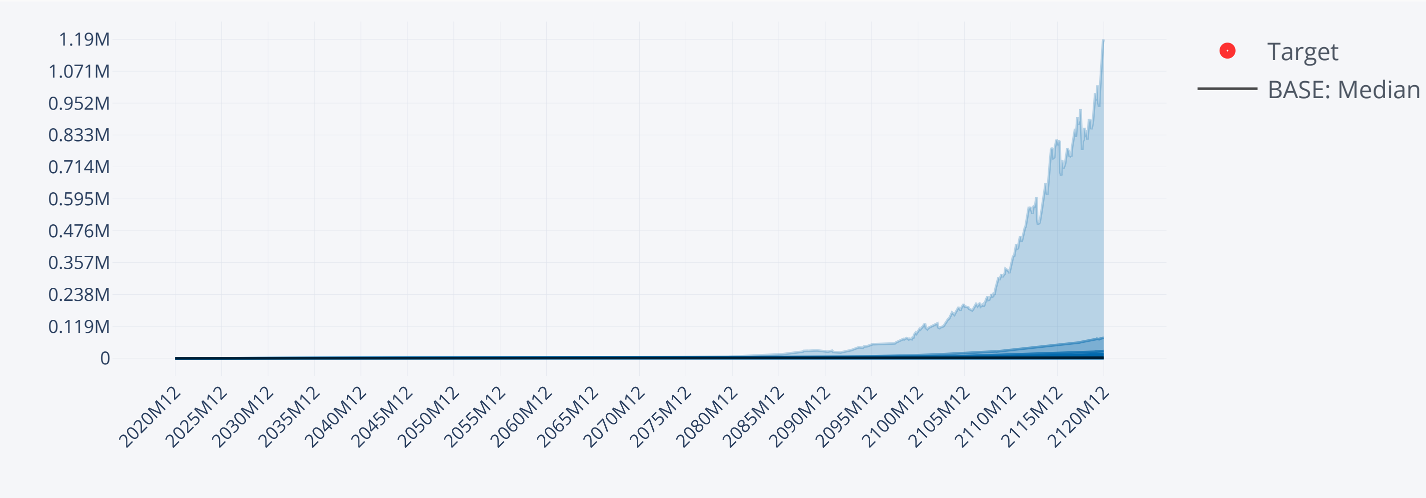
Simulated Data in Percentiles : Mid Cap Cumulative Return

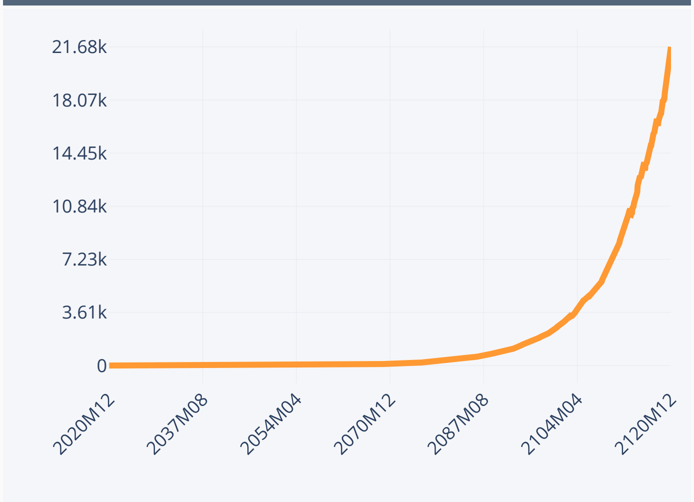


Simulated Data: There are 1200 Time Periods. Percentiles, Mean and Median are calculated across 10000 PATHS.
Percentiles Plotted : Min, 1%, 5%, 10%, 50%, 90%, 95%, 99%, Max
The distributions shown are across the paths for a given time period.

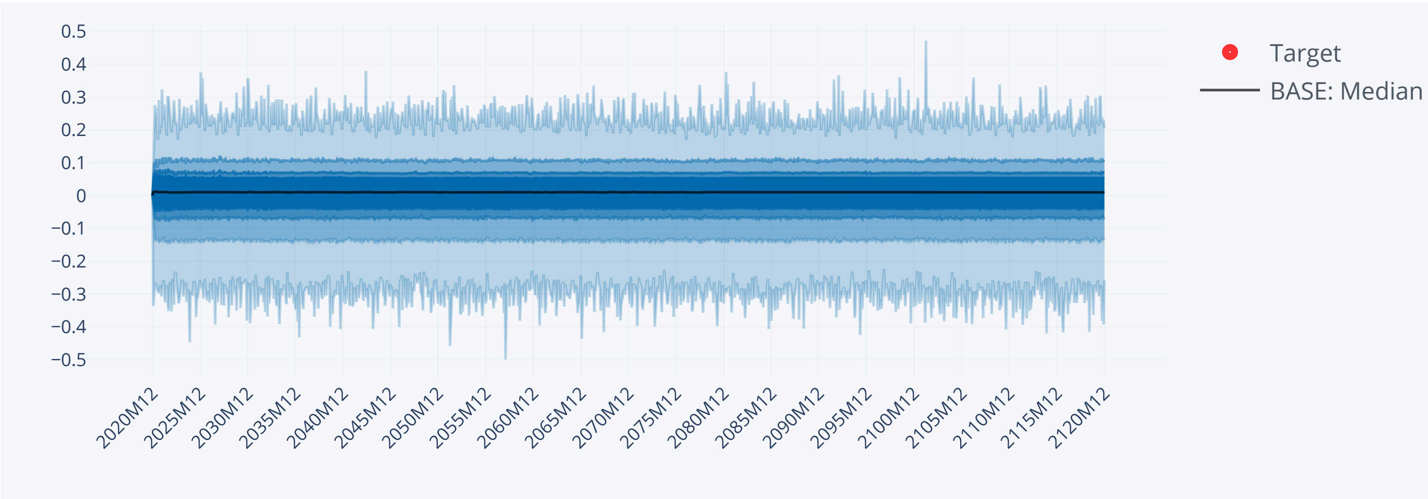
Simulation Summary

	BASE: 2021M12	BASE: 2050M12
mean	0.0956	12.8594
std	0.1734	13.0559
min	-0.4735	-0.9109
1%	-0.2919	-0.0301
5%	-0.1832	1.0789
10%	-0.1254	2.0078
50%	0.0934	9.0076
90%	0.3166	28.4071
95%	0.3832	37.9843
99%	0.5191	63.2073
max	0.8825	167.3029

Cross Sectional Volatility Over Time : BASE



Simulated Data in Percentiles : Large Cap Total Return

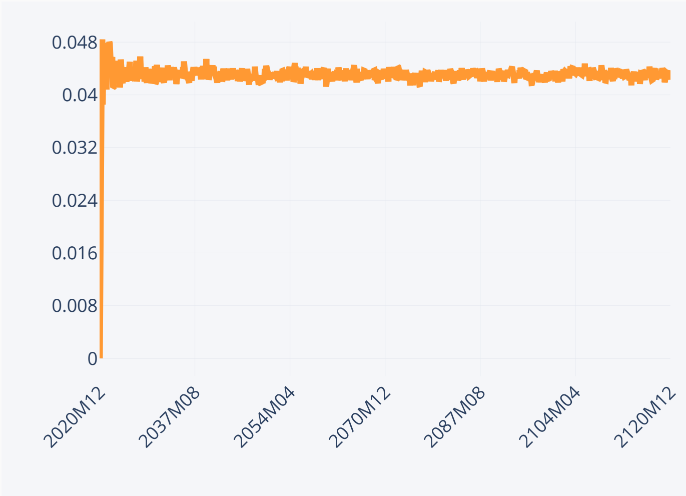


Simulated Data: There are 1200 Time Periods. Percentiles, Mean and Median are calculated across 10000 PATHS.
Percentiles Plotted : Min, 1%, 5%, 10%, 50%, 90%, 95%, 99%, Max
The distributions shown are across the paths for a given time period.

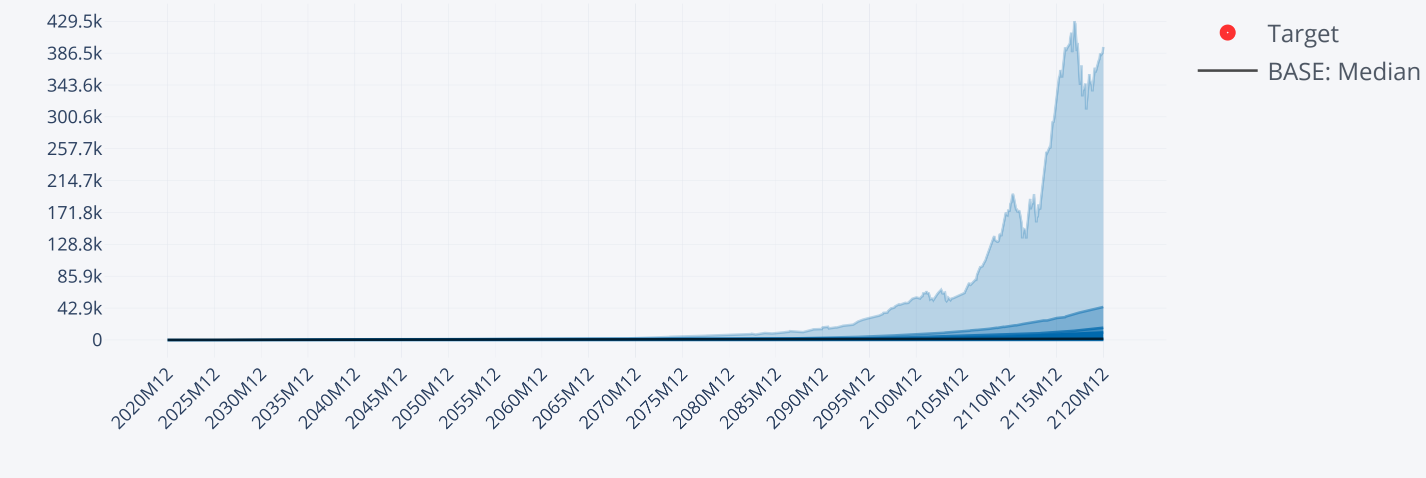
Simulation Summary

	BASE: 2021M12	BASE: 2050M12
mean	0.0079	0.0070
std	0.0444	0.0433
min	-0.2837	-0.3288
1%	-0.1345	-0.1376
5%	-0.0678	-0.0681
10%	-0.0406	-0.0399
50%	0.0102	0.0100
90%	0.0579	0.0530
95%	0.0725	0.0691
99%	0.1074	0.1041
max	0.3228	0.2239

Cross Sectional Volatility Over Time : BASE



Simulated Data in Percentiles : Large Cap Cumulative Return

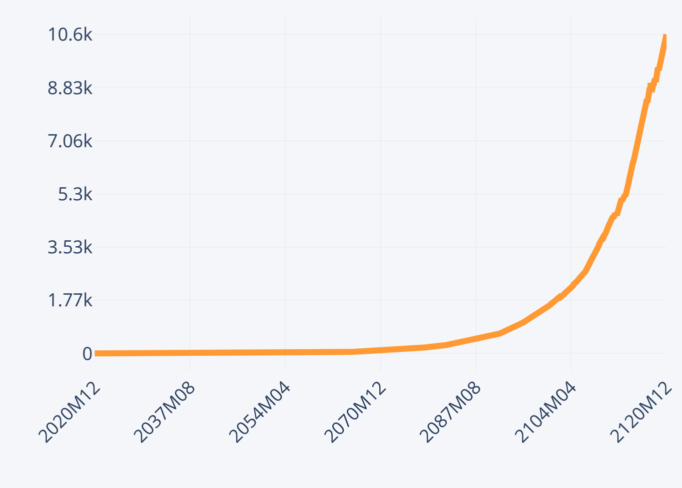


Simulated Data: There are 1200 Time Periods. Percentiles, Mean and Median are calculated across 10000 PATHS.
Percentiles Plotted : Min, 1%, 5%, 10%, 50%, 90%, 95%, 99%, Max
The distributions shown are across the paths for a given time period.

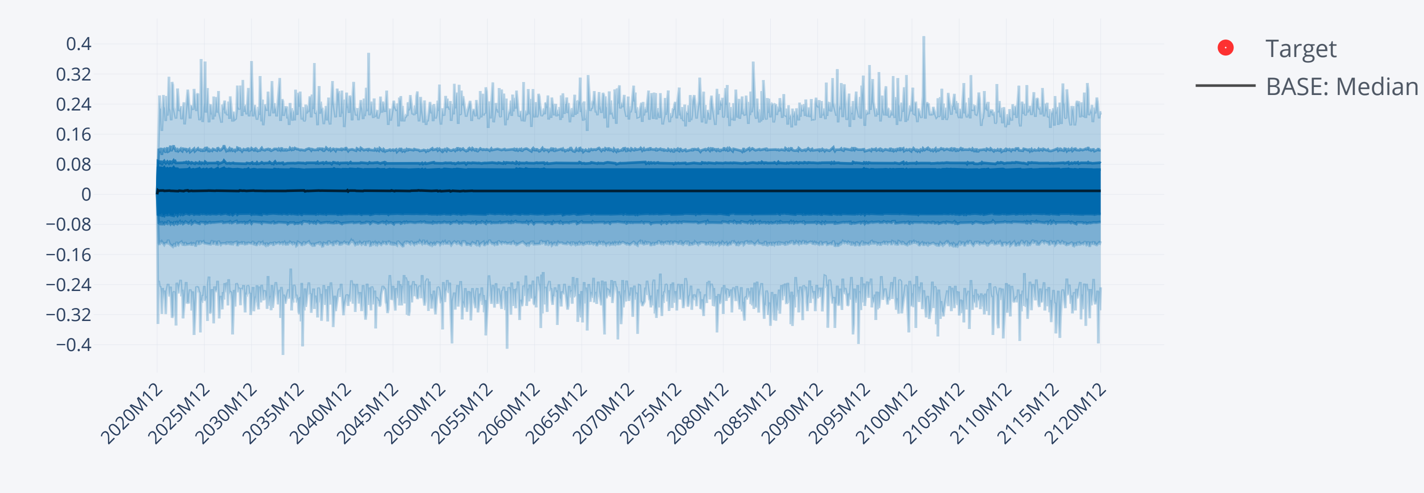
Simulation Summary

	BASE: 2021M12	BASE: 2050M12
mean	0.0943	11.2532
std	0.1627	10.6085
min	-0.5068	-0.8309
1%	-0.2958	-0.0633
5%	-0.1796	1.0279
10%	-0.1180	1.9331
50%	0.0996	8.2779
90%	0.2953	24.0784
95%	0.3561	31.5264
99%	0.4698	49.5601
max	0.8170	119.0670

Cross Sectional Volatility Over Time : BASE



Simulated Data in Percentiles : International Diversified Equity Total Return

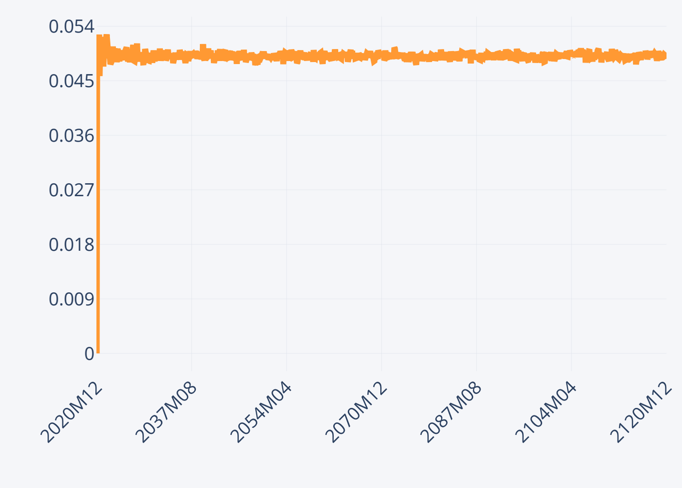


Simulated Data: There are 1200 Time Periods. Percentiles, Mean and Median are calculated across 10000 PATHS.
Percentiles Plotted : Min, 1%, 5%, 10%, 50%, 90%, 95%, 99%, Max
The distributions shown are across the paths for a given time period.

Simulation Summary

	BASE: 2021M12	BASE: 2050M12
mean	0.0083	0.0069
std	0.0501	0.0494
min	-0.2587	-0.2881
1%	-0.1294	-0.1338
5%	-0.0768	-0.0758
10%	-0.0530	-0.0531
50%	0.0103	0.0093
90%	0.0682	0.0653
95%	0.0849	0.0830
99%	0.1205	0.1187
max	0.2616	0.2057

Cross Sectional Volatility Over Time : BASE



International Diversified Equity Cumulative Return

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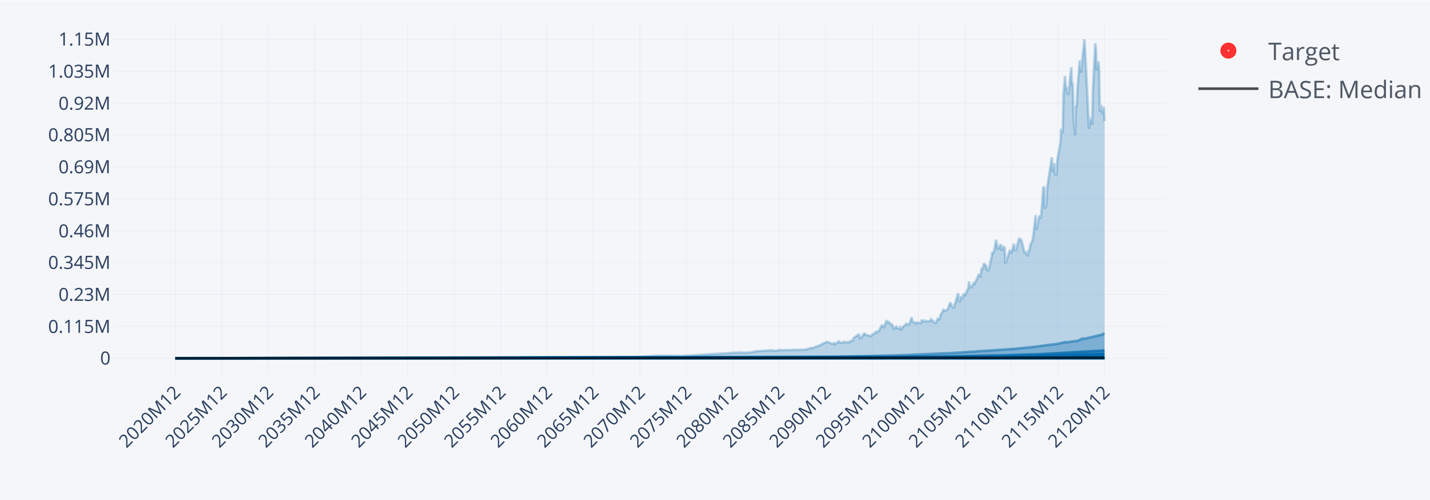
Simulated Data in Percentiles : International Diversified Equity Cumulative Return

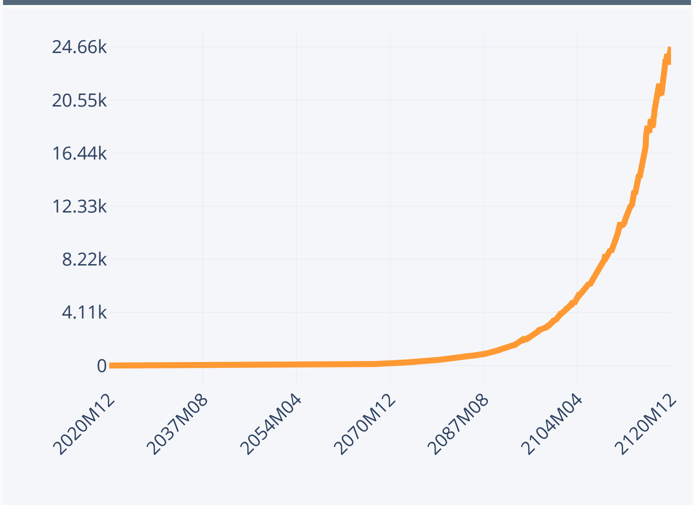


Simulated Data: There are 1200 Time Periods. Percentiles, Mean and Median are calculated across 10000 PATHS.
Percentiles Plotted : Min, 1%, 5%, 10%, 50%, 90%, 95%, 99%, Max
The distributions shown are across the paths for a given time period.

Simulation Summary

	BASE: 2021M12	BASE: 2050M12
mean	0.0984	13.4042
std	0.1920	15.6514
min	-0.4832	-0.9127
1%	-0.3083	-0.0173
5%	-0.2021	0.9618
10%	-0.1431	1.8492
50%	0.0907	8.8537
90%	0.3480	29.8418
95%	0.4300	40.7597
99%	0.5785	71.9352
max	0.9585	400.0841

Cross Sectional Volatility Over Time : BASE



Aggressive US Equity Total Return
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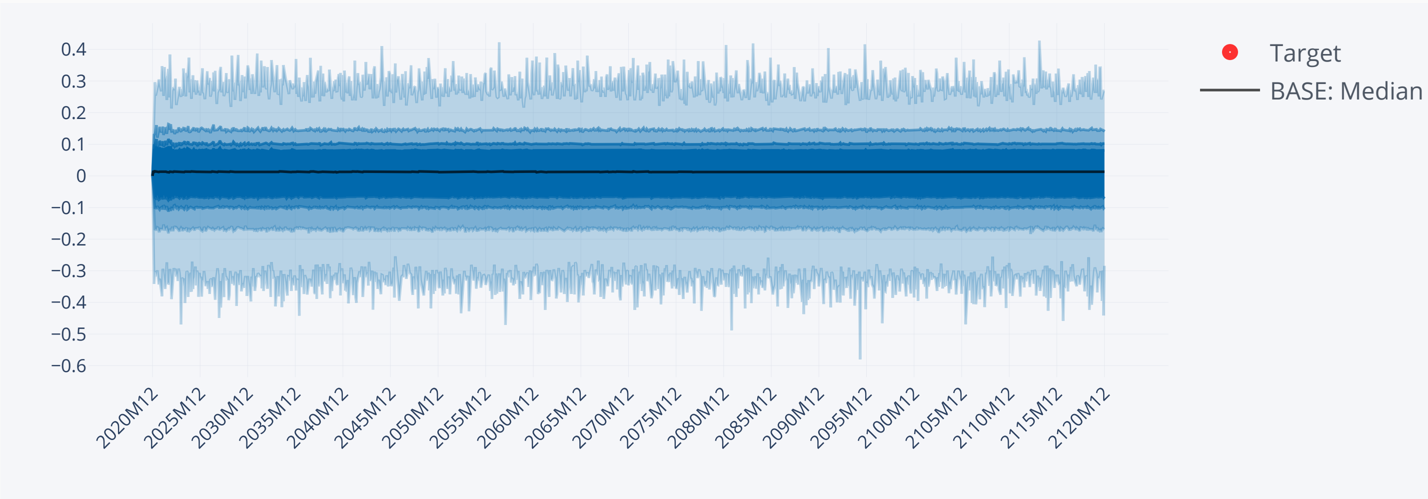
Simulated Data in Percentiles : Aggressive US Equity Total Return

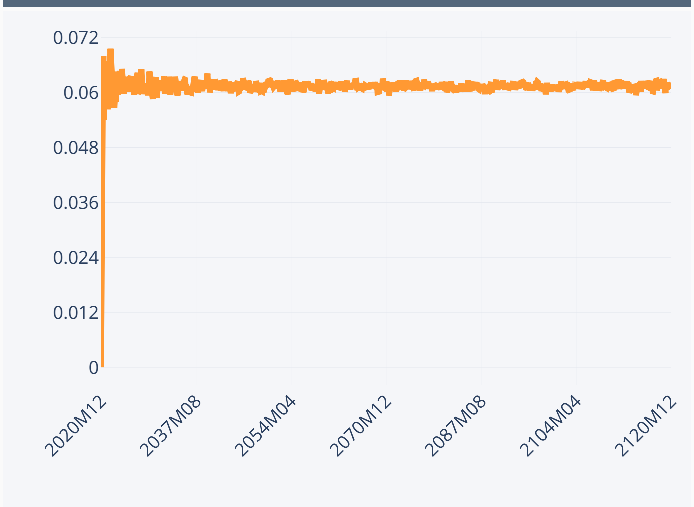


Simulated Data: There are 1200 Time Periods. Percentiles, Mean and Median are calculated across 10000 PATHS.
Percentiles Plotted : Min, 1%, 5%, 10%, 50%, 90%, 95%, 99%, Max
The distributions shown are across the paths for a given time period.

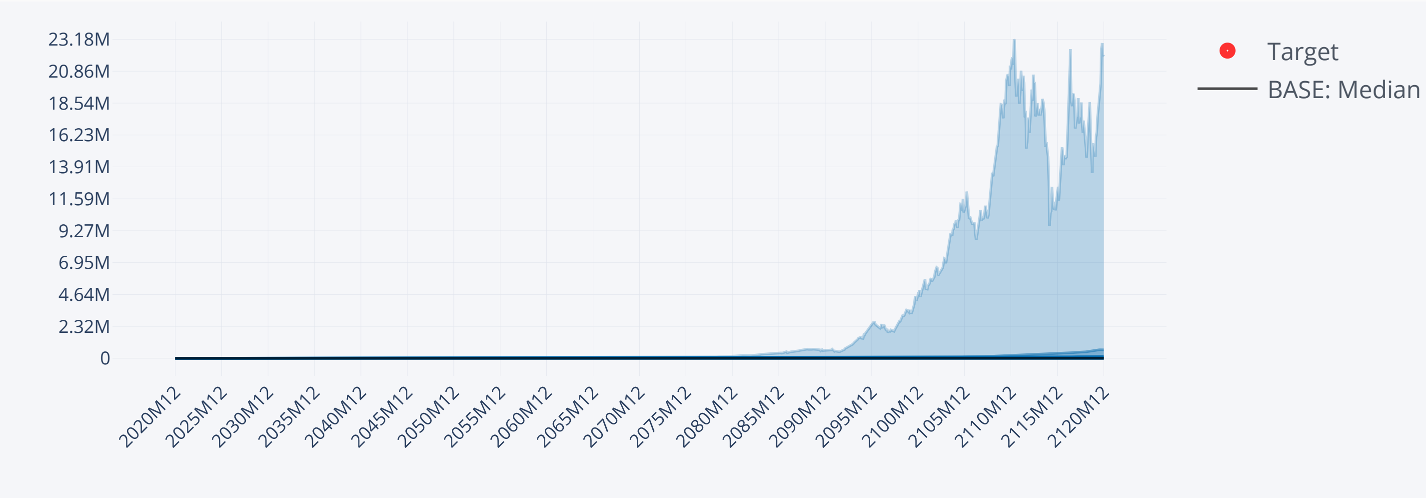
Simulation Summary

	BASE: 2021M12	BASE: 2050M12
mean	0.0089	0.0090
std	0.0622	0.0620
min	-0.3805	-0.3053
1%	-0.1668	-0.1666
5%	-0.0982	-0.1004
10%	-0.0681	-0.0683
50%	0.0123	0.0127
90%	0.0834	0.0812
95%	0.1027	0.1033
99%	0.1422	0.1461
max	0.3467	0.2774

Cross Sectional Volatility Over Time : BASE



Simulated Data in Percentiles : Aggressive US Equity Cumulative Return



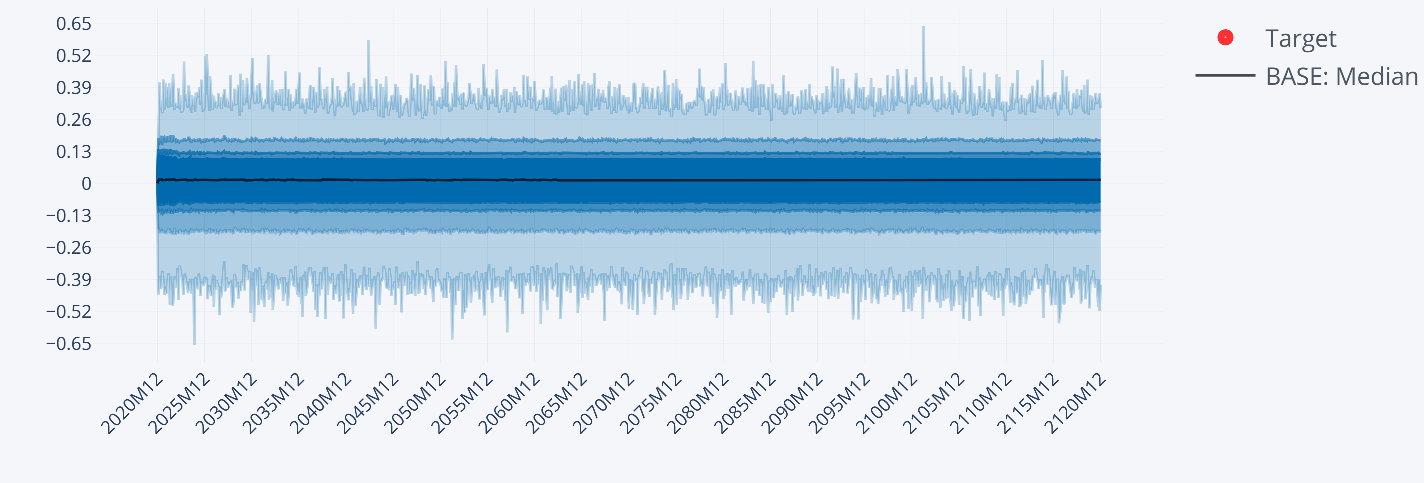
Simulated Data: There are 1200 Time Periods. Percentiles, Mean and Median are calculated across 10000 PATHS.
Percentiles Plotted : Min, 1%, 5%, 10%, 50%, 90%, 95%, 99%, Max
The distributions shown are across the paths for a given time period.

Simulation Summary

	BASE: 2021M12	BASE: 2050M12
mean	0.1185	22.7657
std	0.2337	33.3815
min	-0.5775	-0.9356
1%	-0.3674	-0.3744
5%	-0.2425	0.5880
10%	-0.1786	1.5393
50%	0.1078	11.7433
90%	0.4252	55.4967
95%	0.5238	79.3346
99%	0.7064	162.9476
max	1.2402	539.3238

Cross Sectional Volatility Over Time : BASE

Simulated Data in Percentiles : Aggressive Foreign Equity Total Return

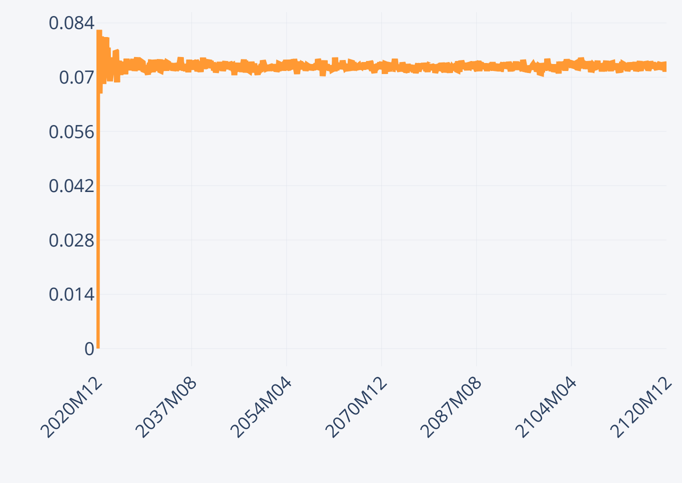


Simulated Data: There are 1200 Time Periods. Percentiles, Mean and Median are calculated across 10000 PATHS.
Percentiles Plotted : Min, 1%, 5%, 10%, 50%, 90%, 95%, 99%, Max
The distributions shown are across the paths for a given time period.

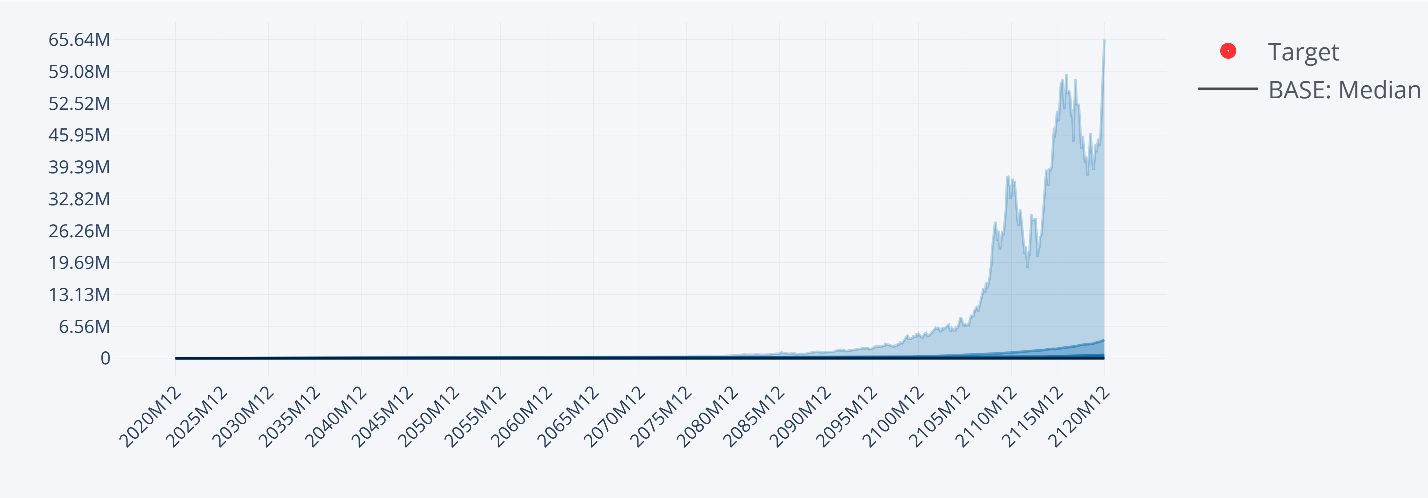
Simulation Summary

	BASE: 2021M12	BASE: 2050M12
mean	0.0124	0.0092
std	0.0767	0.0728
min	-0.4423	-0.4043
1%	-0.1911	-0.1999
5%	-0.1158	-0.1126
10%	-0.0820	-0.0781
50%	0.0146	0.0123
90%	0.1057	0.0954
95%	0.1329	0.1235
99%	0.1848	0.1723
max	0.3448	0.3088

Cross Sectional Volatility Over Time : BASE



Simulated Data in Percentiles : Aggressive Foreign Equity Cumulative Return

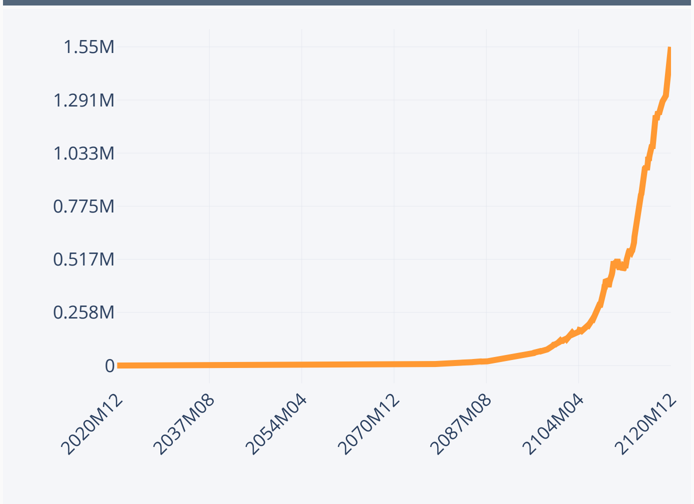


Simulated Data: There are 1200 Time Periods. Percentiles, Mean and Median are calculated across 10000 PATHS.
Percentiles Plotted : Min, 1%, 5%, 10%, 50%, 90%, 95%, 99%, Max
The distributions shown are across the paths for a given time period.

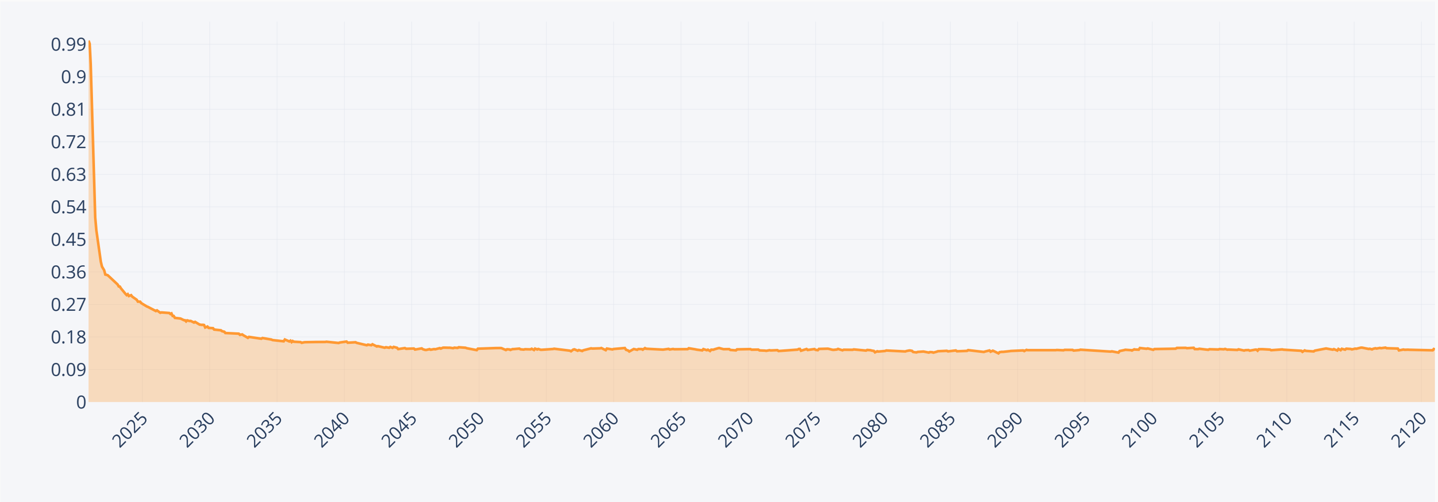
Simulation Summary

	BASE: 2021M12	BASE: 2050M12
mean	0.1436	39.4342
std	0.3015	78.6570
min	-0.6873	-0.9880
1%	-0.4633	-0.5208
5%	-0.3079	0.3229
10%	-0.2199	1.4338
50%	0.1211	15.2746
90%	0.5403	96.1825
95%	0.6794	155.5280
99%	0.9390	359.9721
max	1.6141	1648.6061

Cross Sectional Volatility Over Time : BASE

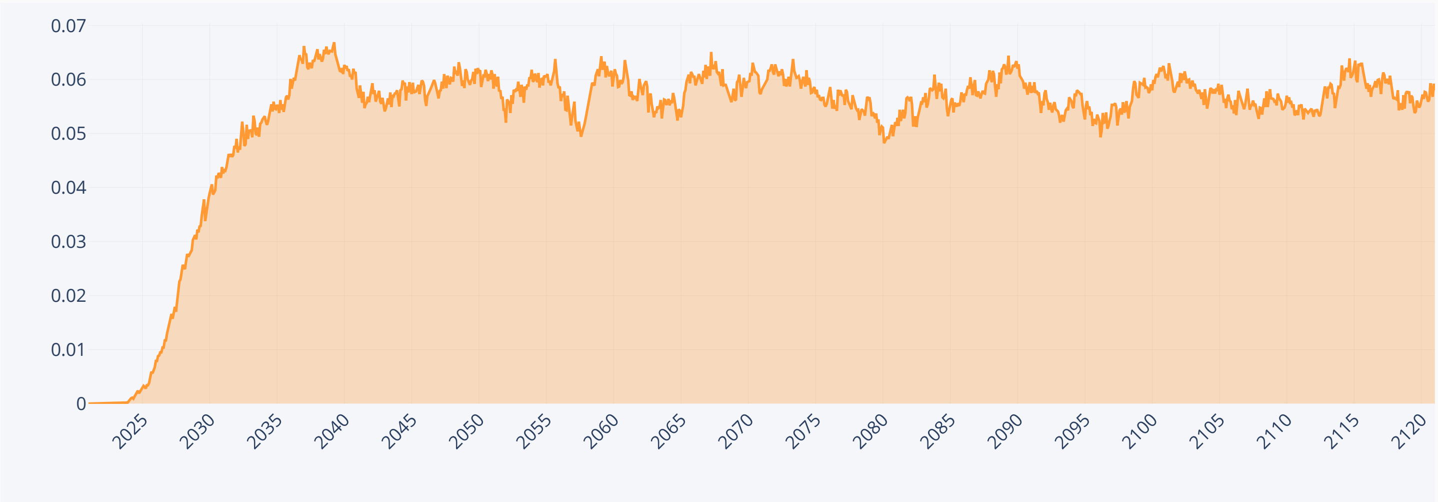


Term Structure Inversion Probability



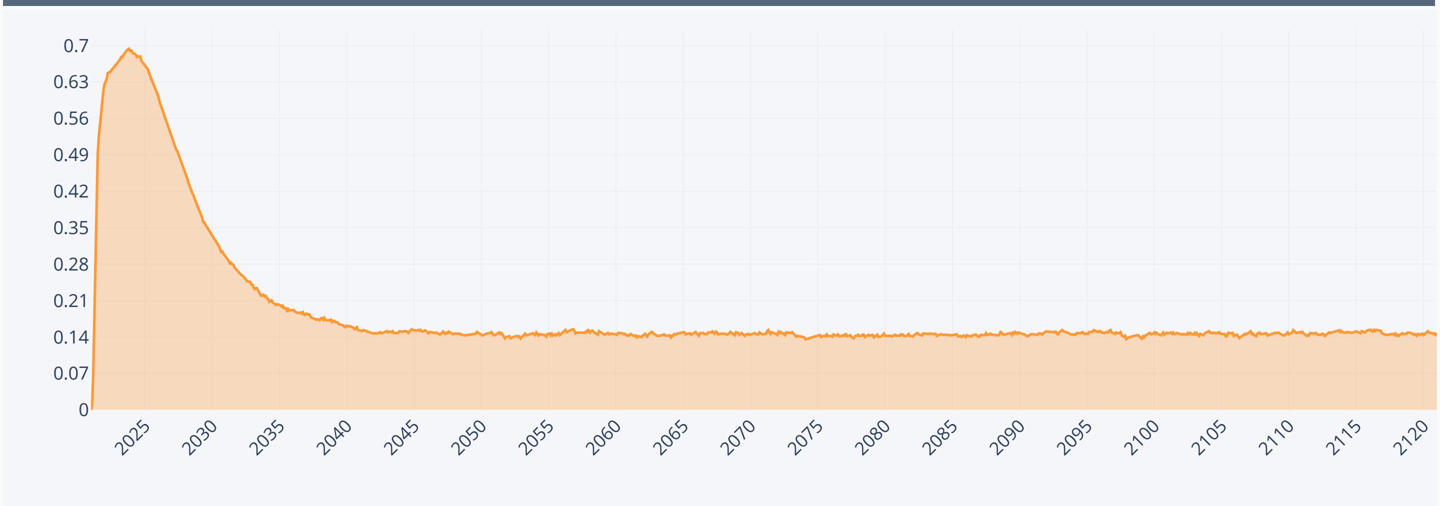
Probability that 1 Year yield is higher than 20 Year Yield.

Term Structure Hump Probability



Probability that 1 Year Yield is higher than both 1 month and 20 Year Yield.

Term Structure Bowl Probability



Probability that 1 Year Yield is lower than than both 1 month and 20 Year Yield.

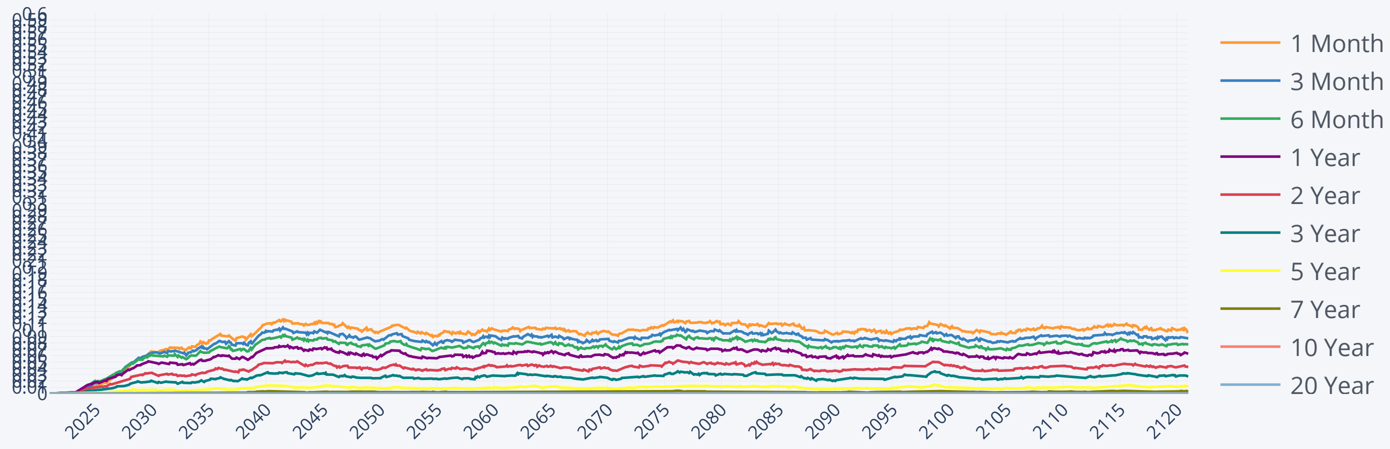
Correlation Matrix of Total Return in the 1st Simulation Year

	Aggressive Foreign Equity	Aggressive US Equity	High Yield Corp Bonds	Int Govt Bonds	Int Inv Corp Bonds	International Diversified Equity	Large Cap	Long Govt Bonds	Long Inv Corp Bonds	Mid Cap	Money Market	Short Govt Bonds	Short Inv Corp Bonds	Small Cap
Aggressive Foreign Equity	1.00	0.60	0.30	0.00	0.14	0.75	0.76	-0.03	0.14	0.72	-0.12	0.02	0.11	0.70
Aggressive US Equity	0.60	1.00	0.39	-0.01	0.17	0.60	0.82	-0.05	0.18	0.80	-0.12	0.00	0.13	0.82
High Yield Corp Bonds	0.30	0.39	1.00	0.68	0.89	0.32	0.40	0.64	0.88	0.41	-0.53	0.69	0.87	0.39
Int Govt Bonds	0.00	-0.01	0.68	1.00	0.93	-0.01	0.00	0.97	0.92	0.00	-0.67	0.99	0.93	0.01
Int Inv Corp Bonds	0.14	0.17	0.89	0.93	1.00	0.15	0.19	0.90	0.98	0.19	-0.66	0.93	0.98	0.19
International Diversified Equity	0.75	0.60	0.32	-0.01	0.15	1.00	0.78	-0.04	0.15	0.71	-0.09	0.01	0.11	0.70
Large Cap	0.76	0.82	0.40	0.00	0.19	0.78	1.00	-0.03	0.20	0.90	-0.12	0.01	0.14	0.90
Long Govt Bonds	-0.03	-0.05	0.64	0.97	0.90	-0.04	-0.03	1.00	0.92	-0.03	-0.61	0.93	0.87	-0.02
Long Inv Corp Bonds	0.14	0.18	0.88	0.92	0.98	0.15	0.20	0.92	1.00	0.20	-0.63	0.89	0.94	0.20
Mid Cap	0.72	0.80	0.41	0.00	0.19	0.71	0.90	-0.03	0.20	1.00	-0.11	0.02	0.15	0.93
Money Market	-0.12	-0.12	-0.53	-0.67	-0.66	-0.09	-0.12	-0.61	-0.63	-0.11	1.00	-0.64	-0.63	-0.12
Short Govt Bonds	0.02	0.00	0.69	0.99	0.93	0.01	0.01	0.93	0.89	0.02	-0.64	1.00	0.95	0.02
Short Inv Corp Bonds	0.11	0.13	0.87	0.93	0.98	0.11	0.14	0.87	0.94	0.15	-0.63	0.95	1.00	0.15
Small Cap	0.70	0.82	0.39	0.01	0.19	0.70	0.90	-0.02	0.20	0.93	-0.12	0.02	0.15	1.00

Correlation Matrix of Total Return in the 30th Simulation Year

	Aggressive Foreign Equity	Aggressive US Equity	High Yield Corp Bonds	Int Govt Bonds	Int Inv Corp Bonds	International Diversified Equity	Large Cap	Long Govt Bonds	Long Inv Corp Bonds	Mid Cap	Money Market	Short Govt Bonds	Short Inv Corp Bonds	Small Cap
Aggressive Foreign Equity	1.00	0.65	0.24	-0.08	0.09	0.57	0.79	-0.10	0.10	0.70	0.01	-0.05	0.04	0.69
Aggressive US Equity	0.65	1.00	0.29	-0.12	0.09	0.63	0.82	-0.14	0.11	0.82	0.01	-0.08	0.04	0.82
High Yield Corp Bonds	0.24	0.29	1.00	0.55	0.81	0.23	0.30	0.52	0.81	0.31	0.25	0.53	0.71	0.28
Int Govt Bonds	-0.08	-0.12	0.55	1.00	0.91	-0.09	-0.10	0.98	0.89	-0.11	0.37	0.93	0.87	-0.11
Int Inv Corp Bonds	0.09	0.09	0.81	0.91	1.00	0.08	0.11	0.88	0.98	0.11	0.37	0.86	0.93	0.09
International Diversified Equity	0.57	0.63	0.23	-0.09	0.08	1.00	0.76	-0.11	0.09	0.68	0.01	-0.05	0.04	0.67
Large Cap	0.79	0.82	0.30	-0.10	0.11	0.76	1.00	-0.13	0.13	0.89	0.01	-0.06	0.06	0.88
Long Govt Bonds	-0.10	-0.14	0.52	0.98	0.88	-0.11	-0.13	1.00	0.89	-0.14	0.24	0.84	0.78	-0.13
Long Inv Corp Bonds	0.10	0.11	0.81	0.89	0.98	0.09	0.13	0.89	1.00	0.13	0.26	0.78	0.85	0.11
Mid Cap	0.70	0.82	0.31	-0.11	0.11	0.68	0.89	-0.14	0.13	1.00	0.01	-0.06	0.06	0.92
Money Market	0.01	0.01	0.25	0.37	0.37	0.01	0.01	0.24	0.26	0.01	1.00	0.68	0.67	0.01
Short Govt Bonds	-0.05	-0.08	0.53	0.93	0.86	-0.05	-0.06	0.84	0.78	-0.06	0.68	1.00	0.96	-0.07
Short Inv Corp Bonds	0.04	0.04	0.71	0.87	0.93	0.04	0.06	0.78	0.85	0.06	0.67	0.96	1.00	0.04
Small Cap	0.69	0.82	0.28	-0.11	0.09	0.67	0.88	-0.13	0.11	0.92	0.01	-0.07	0.04	1.00

Negative Yields Probability



The above plot shows percent of negative yields across the scenarios for each time period.

Negative Probability Summary

	2021-12-31T00:00:00	2030-12-31T00:00:00	2040-12-31T00:00:00	2050-12-31T00:00:00
1 Month	0.0000	0.0689	0.1123	0.1054
3 Month	0.0000	0.0655	0.1006	0.0921
6 Month	0.0000	0.0588	0.0897	0.0829
1 Year	0.0000	0.0482	0.0734	0.0683
2 Year	0.0000	0.0314	0.0497	0.0448
3 Year	0.0000	0.0184	0.0315	0.0282
5 Year	0.0000	0.0058	0.0128	0.0095
7 Year	0.0000	0.0012	0.0029	0.0020
10 Year	0.0000	0.0000	0.0001	0.0002
20 Year	0.0000	0.0000	0.0000	0.0000
30 Year	0.0000	0.0000	0.0000	0.0000