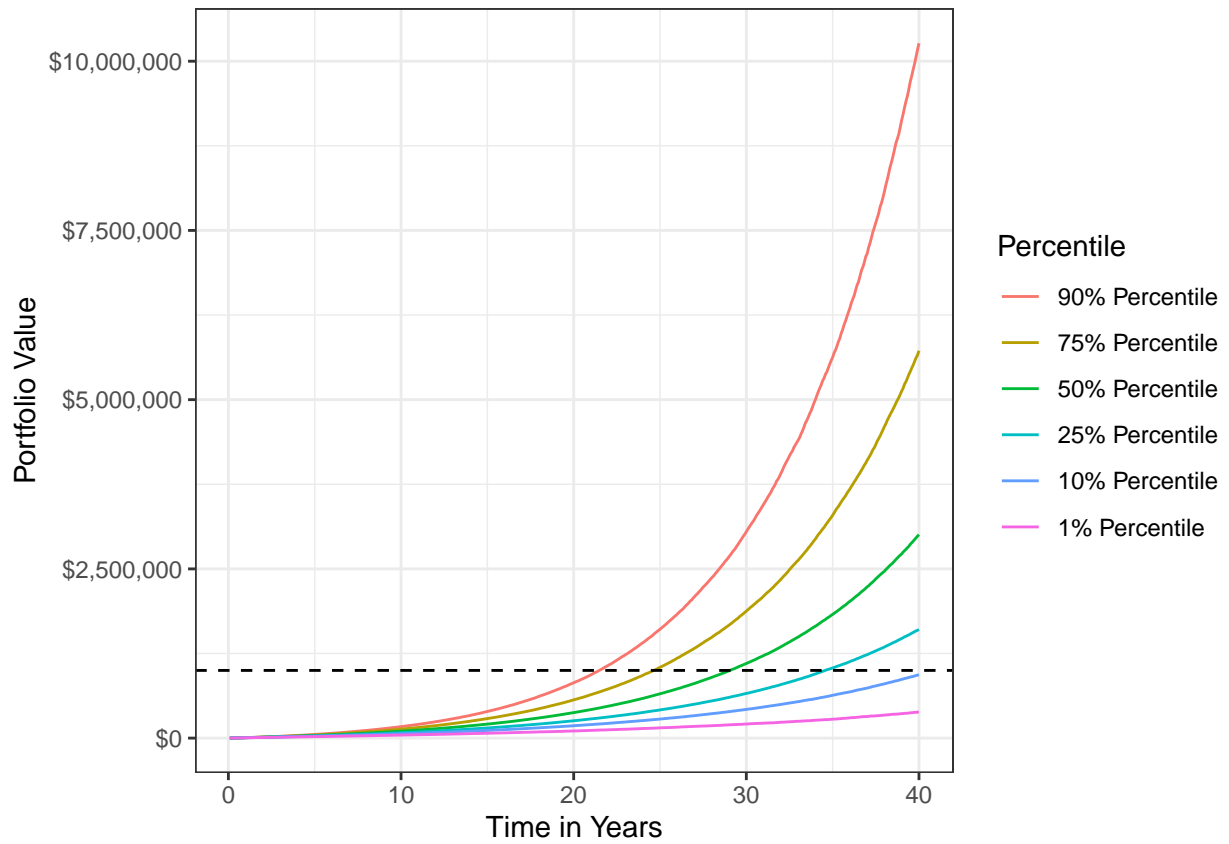


# Simulation

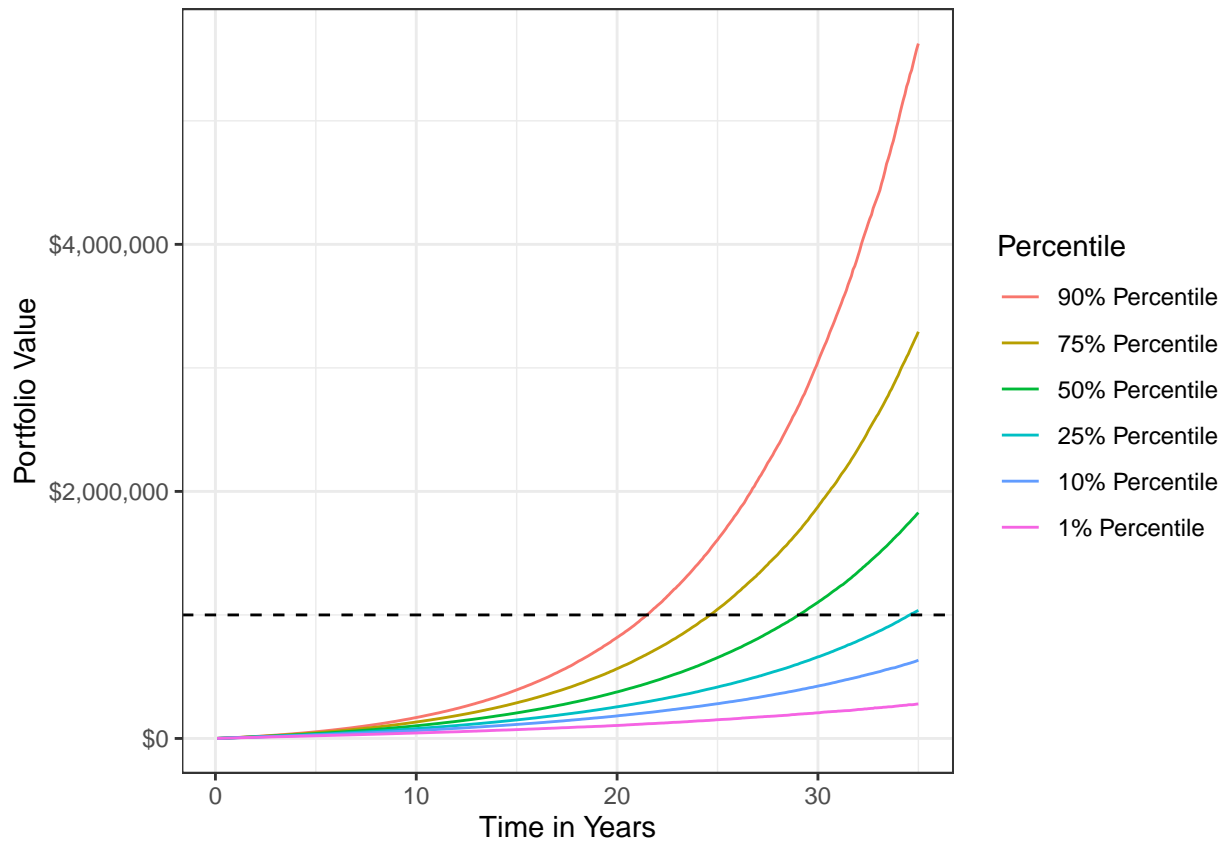
## Non-Inflation Gross Return

### Bootstrapping

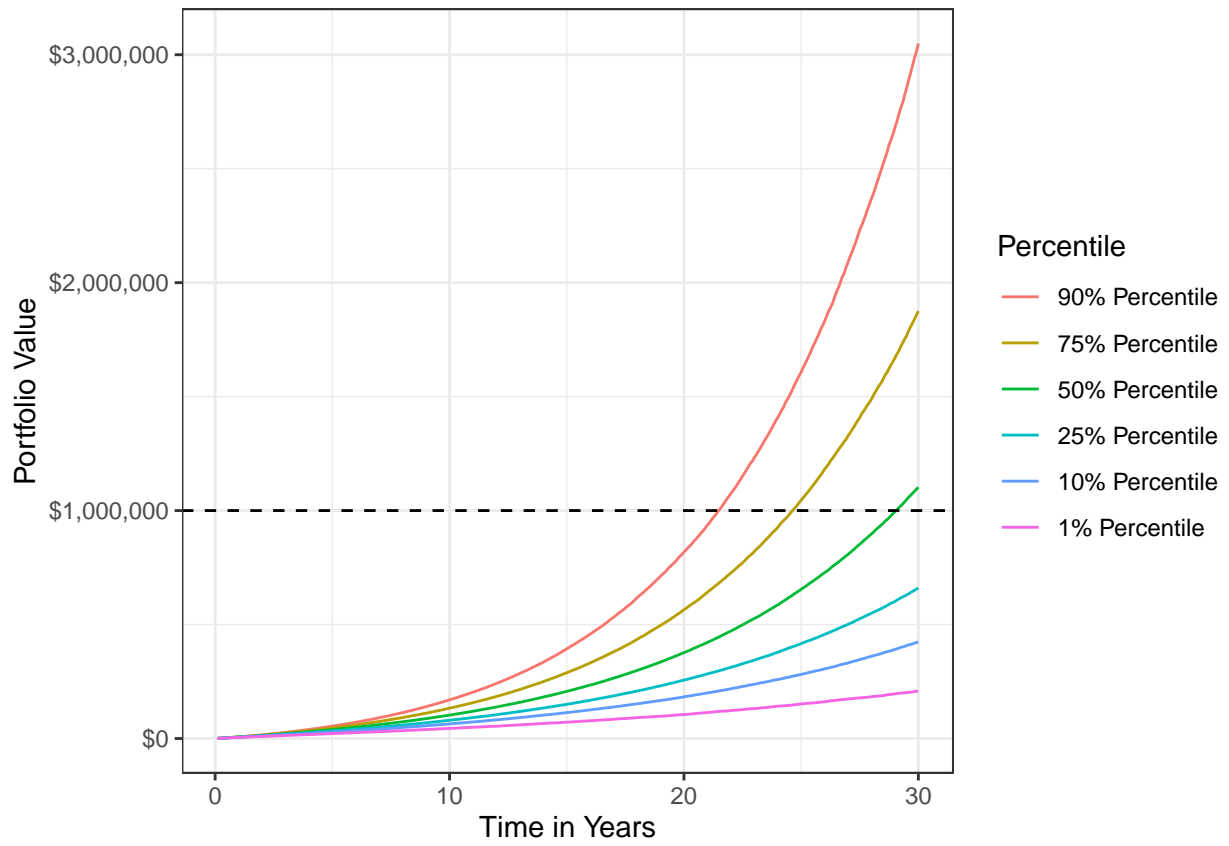
40 years



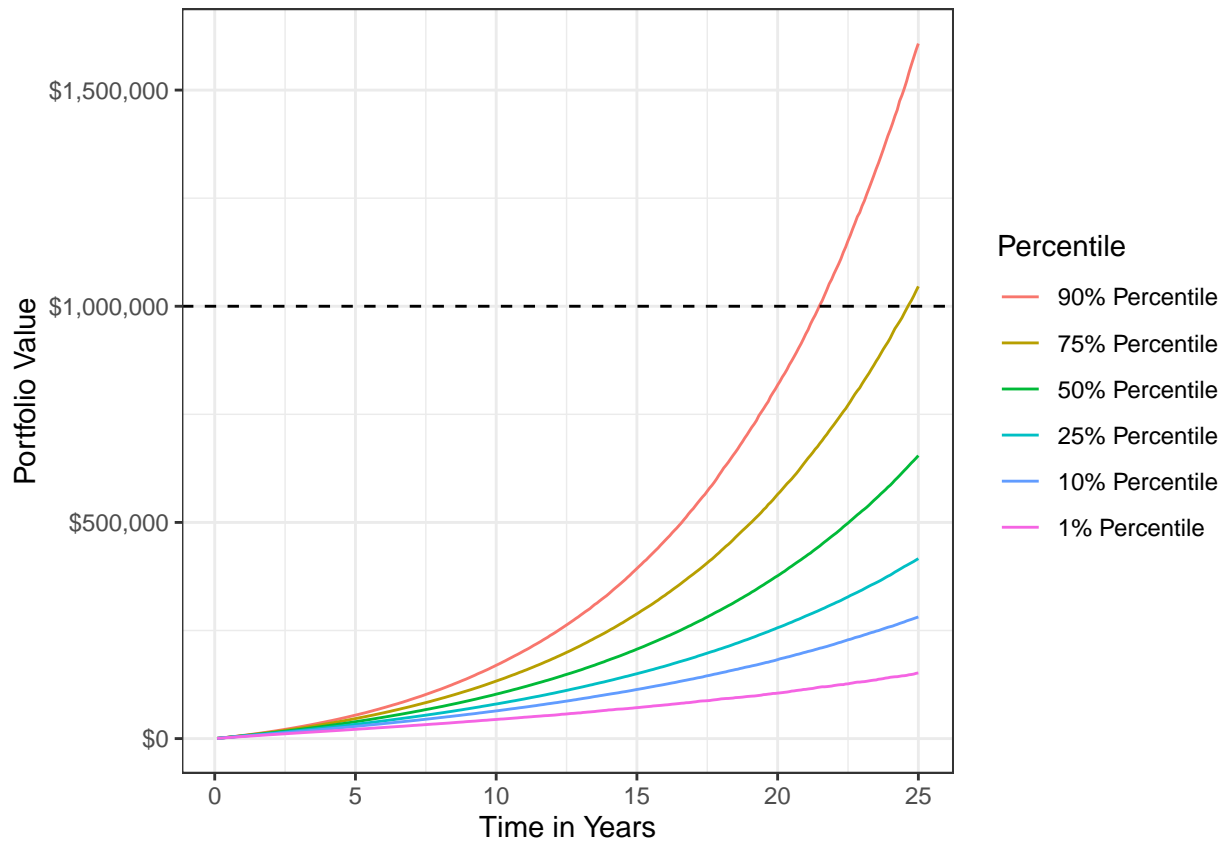
35 years



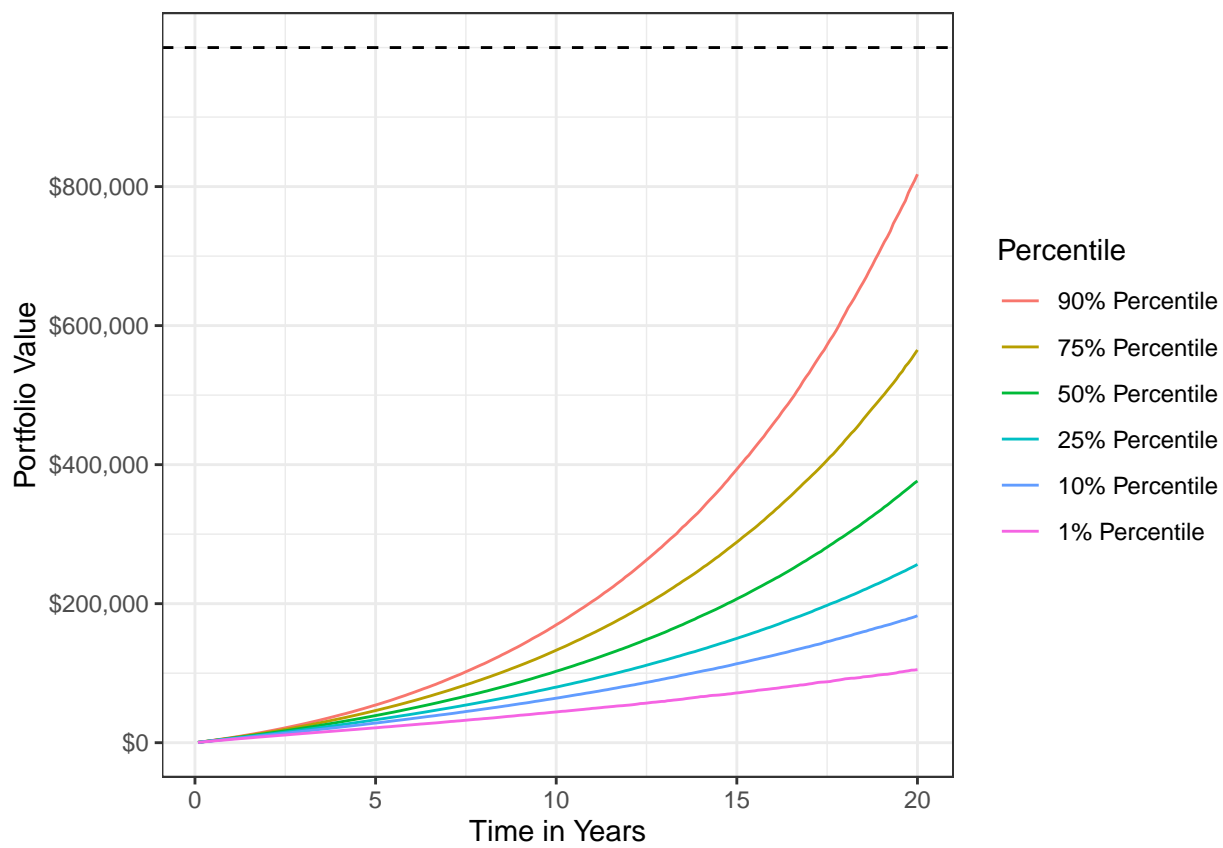
30 years



25 years

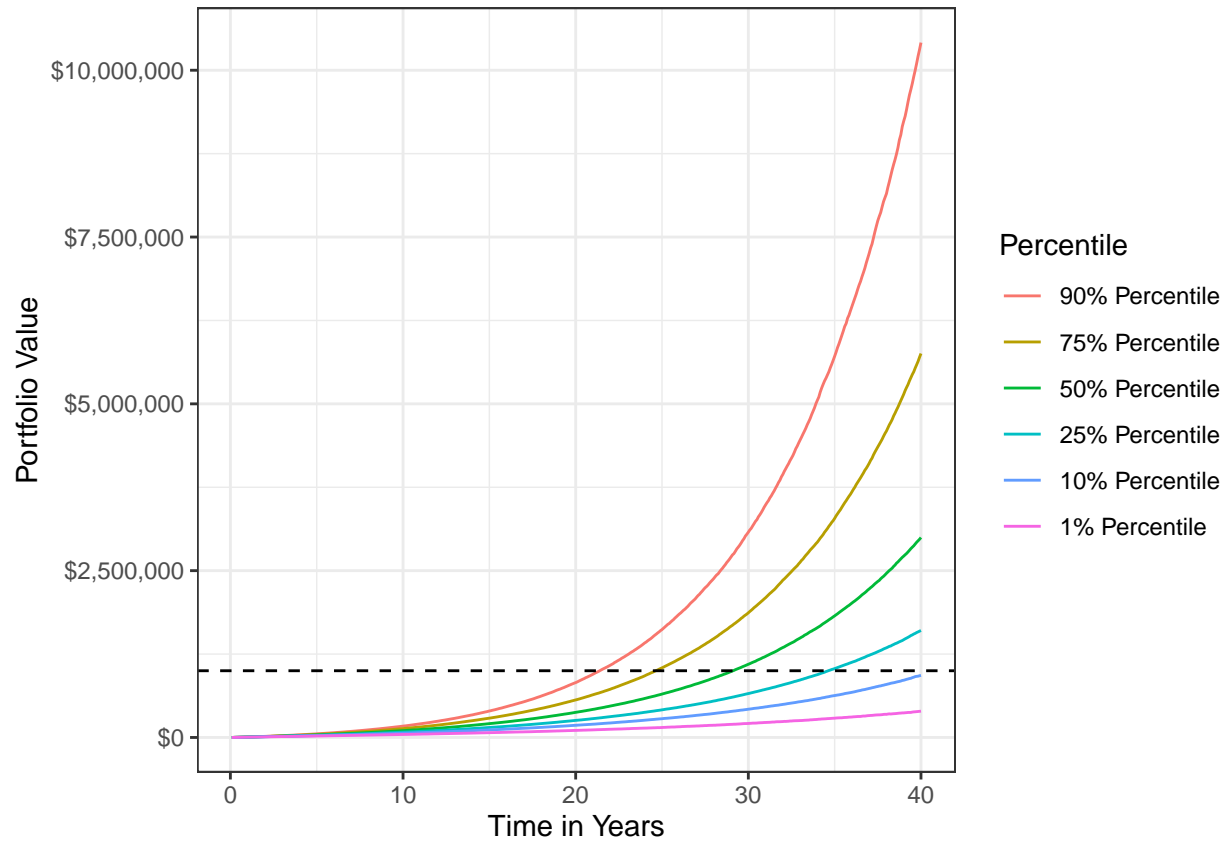


20 years

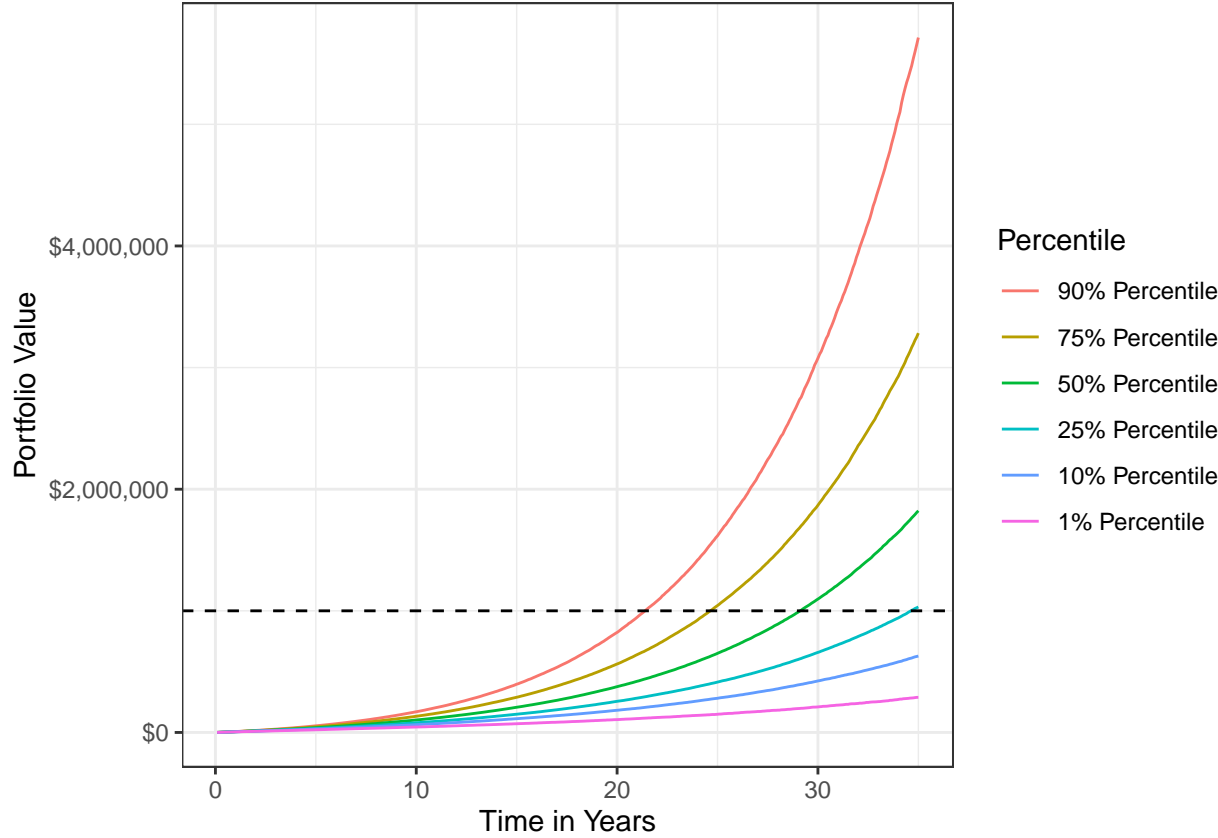


## Log-Normal Simulation

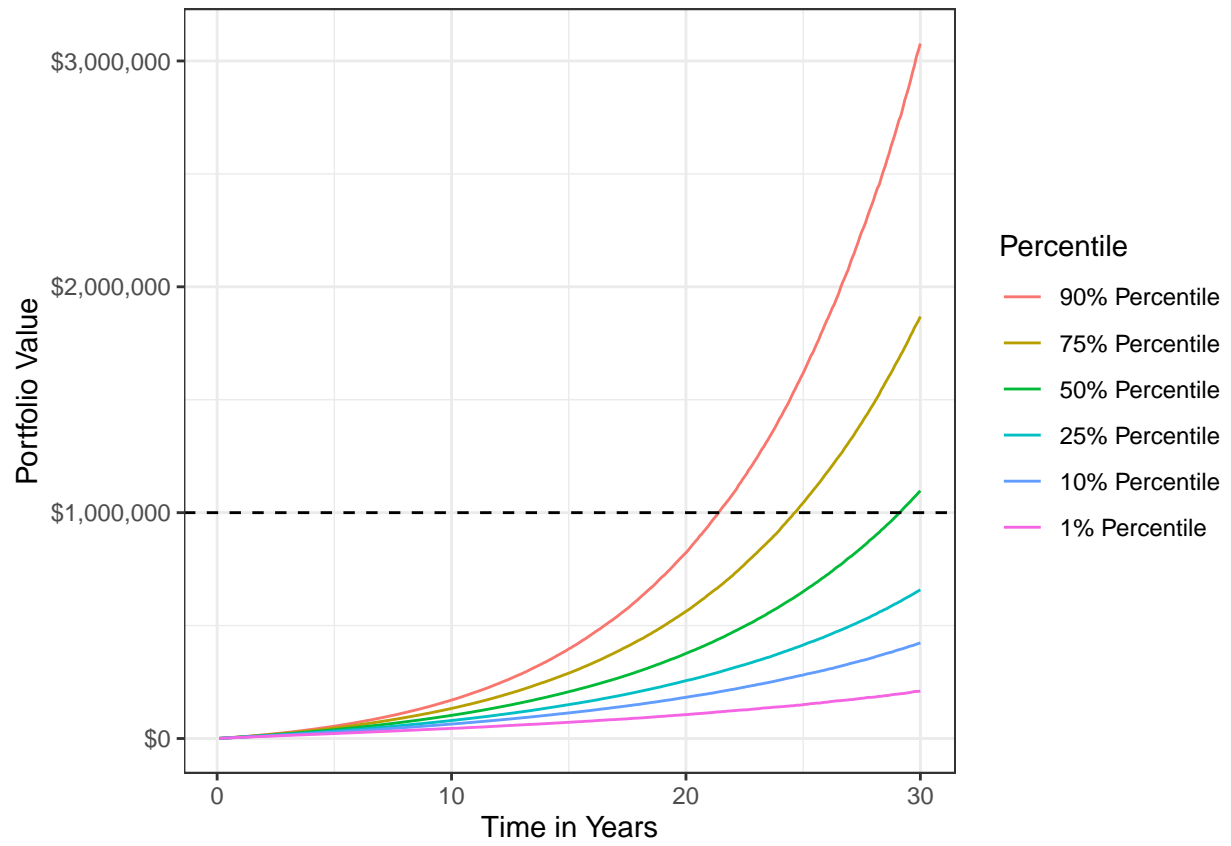
40 years



35 years

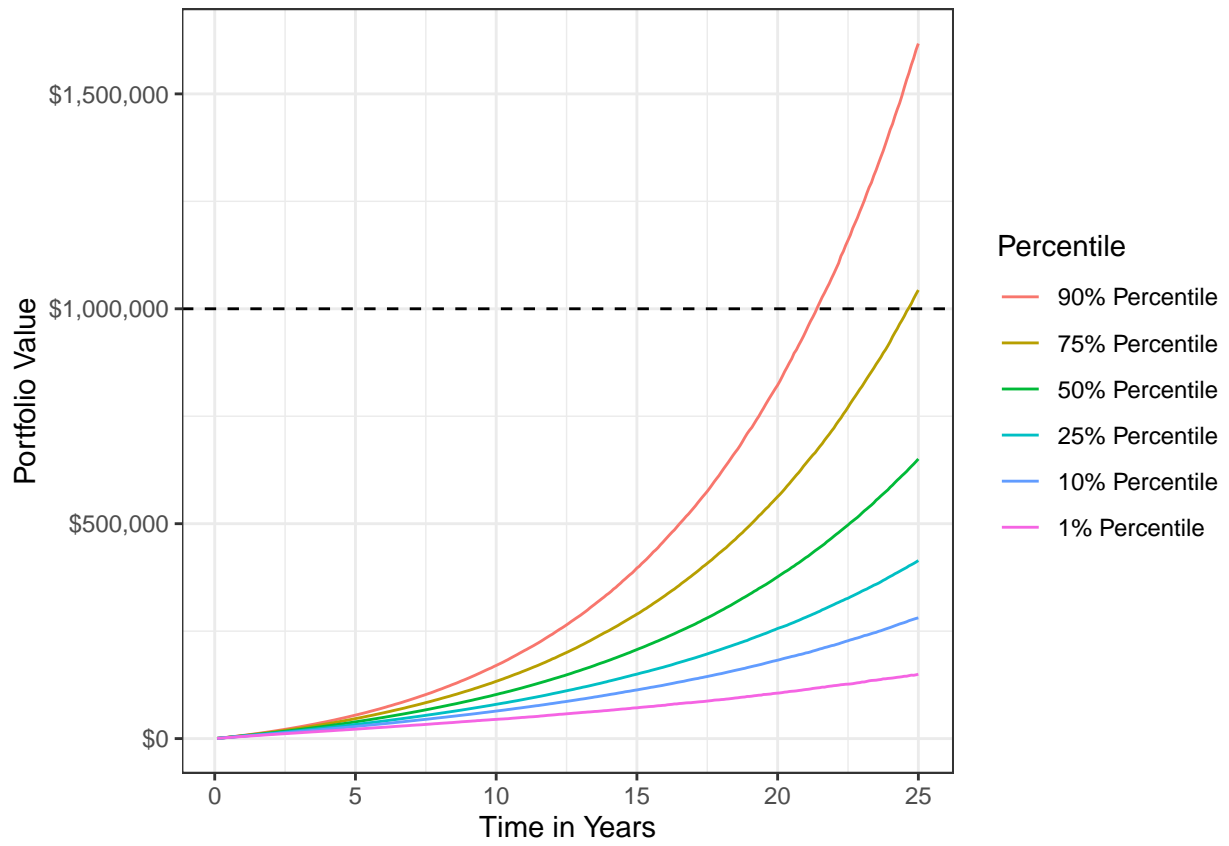


30 years

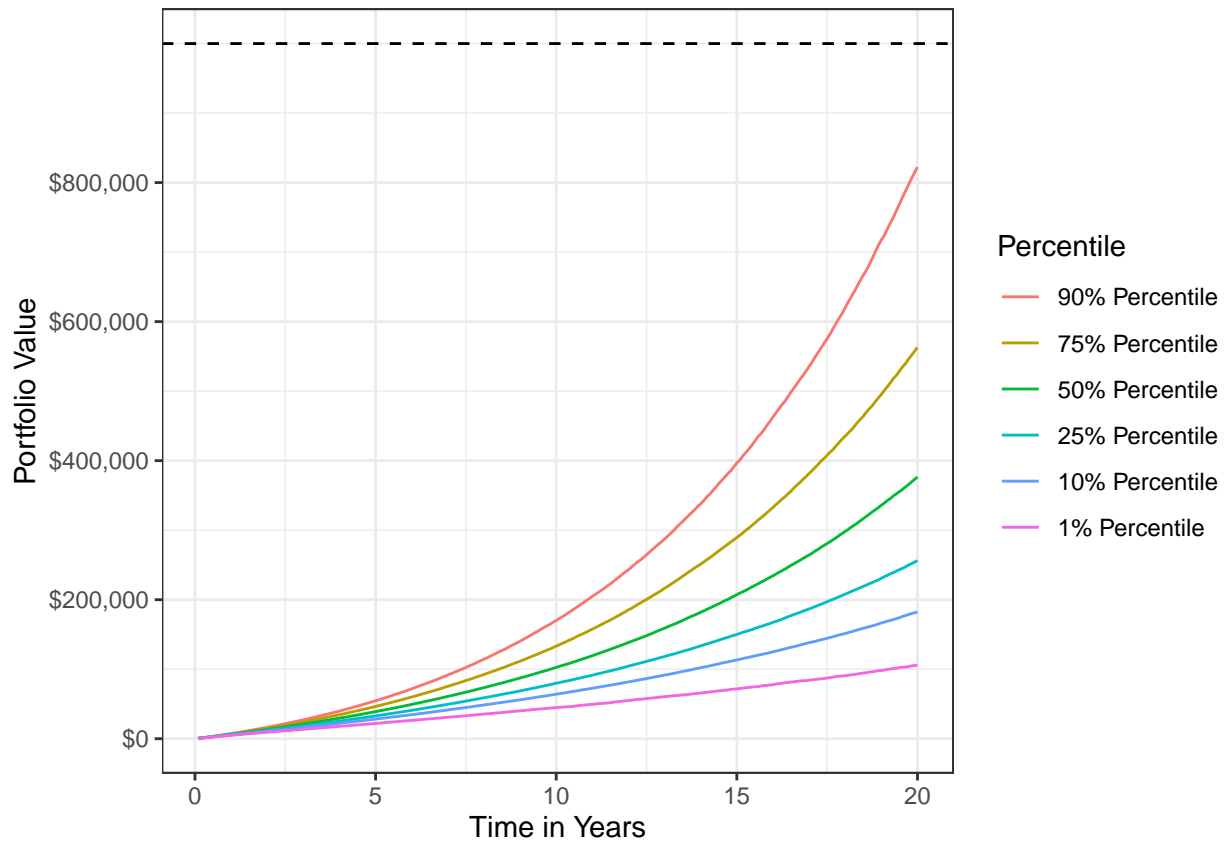




25 years



20 years



## When Hit \$1m

### Simple Bootstrapping

##	Years to reach \$1m	Money have invested(\$)
## Max	11.33333	68000
## 0.99% percentile	17.25000	103500
## 0.9% percentile	21.50000	129000
## 0.75% percentile	24.66667	148000
## 0.5% percentile	29.08333	174500
## 0.25% percentile	34.58333	207500
## 0.1% percentile	NA	NA
## 0.01% percentile	NA	NA

### Log-Normal Simulation

##	Years to reach \$1m	Money have invested(\$)
## Max	12.33333	74000
## 0.99% percentile	17.08333	102500
## 0.9% percentile	21.41667	128500
## 0.75% percentile	24.66667	148000
## 0.5% percentile	29.16667	175000
## 0.25% percentile	34.66667	208000
## 0.1% percentile	NA	NA
## 0.01% percentile	NA	NA

## Terminal Values

### Simple Bootstrapping

##	20-Year Portfolio	25-Year Portfolio	30-Year Portfolio
## Max	6635322.21	15219676.7	42855193.60
## 99% Percentile	1577006.11	3463873.2	7261286.39
## 90% Percentile	817751.75	1607569.1	3049041.03
## 75% Percentile	565000.86	1045955.1	1875256.22
## 50% Percentile	376523.88	654491.7	1101949.50
## 25% Percentile	256470.09	416256.1	660555.34
## 10% Percentile	182646.31	281264.6	423929.74
## 1% Percentile	105153.58	151869.6	207736.51
## Min	30919.42	47438.7	53394.54
##	35-Year Portfolio	40-Year Portfolio	
## Max	88466161.67	213462386.6	
## 99% Percentile	14736665.04	28873291.9	
## 90% Percentile	5625386.37	10265547.9	
## 75% Percentile	3292505.79	5722847.3	
## 50% Percentile	1828071.82	3005715.5	
## 25% Percentile	1036906.82	1605262.7	
## 10% Percentile	633744.67	936612.0	
## 1% Percentile	279191.95	386723.0	
## Min	77447.68	69376.1	

### Log-Normal Simulation

##	20-Year Portfolio	25-Year Portfolio	30-Year Portfolio
## Max	7466490.41	18143688.46	43966015.16
## 99% Percentile	1617756.71	3557861.34	7327341.30
## 90% Percentile	822404.01	1617067.65	3076974.63
## 75% Percentile	562820.58	1043550.96	1868187.91
## 50% Percentile	376405.93	650574.31	1096762.11
## 25% Percentile	256196.03	414216.74	658314.73
## 10% Percentile	182456.26	280879.50	423585.56
## 1% Percentile	105797.60	149671.06	210013.15
## Min	43285.12	61193.92	73321.24
##	35-Year Portfolio	40-Year Portfolio	
## Max	108896317.97	204325313.4	
## 99% Percentile	14973876.30	30092837.9	
## 90% Percentile	5713338.12	10414161.6	
## 75% Percentile	3283286.65	5754366.6	
## 50% Percentile	1822452.54	2997013.2	
## 25% Percentile	1031981.59	1603267.3	
## 10% Percentile	628250.41	930636.4	
## 1% Percentile	288499.35	394589.2	
## Min	88791.29	125921.0	