VaR Calculation

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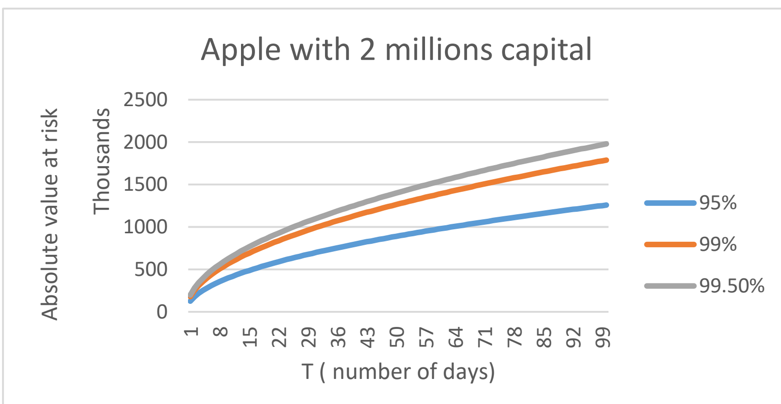
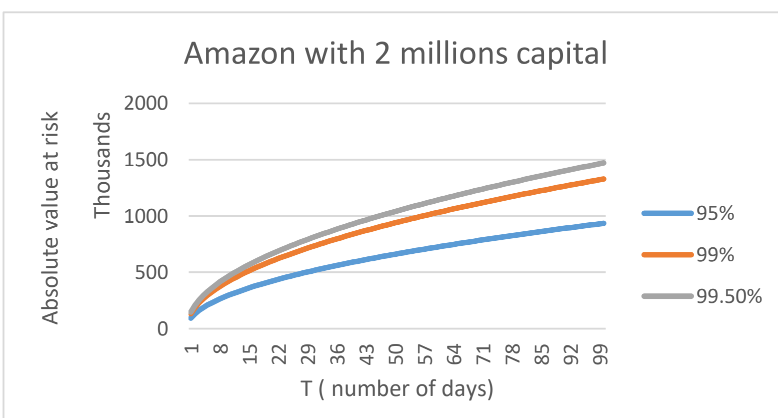
In this report data of last 6 months of two on- dividing assets has been considered for calculation

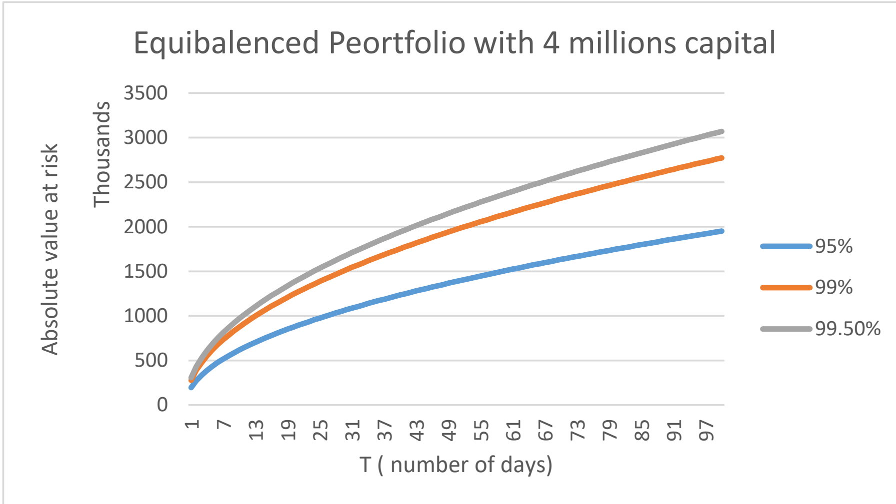
First Asset	Second Asset	Initial considered portfolio value
Amazon	Apple	$ 4 Millions

Average(%)(daily)			Std (daily)			
AMZN	APPL	Portfolio	AMZN	AAPL	Portfolio	Covariance
-0.23174	-0.29475	-0.2768	0.028511	0.038365	0.029741	0.563890672

Parametric

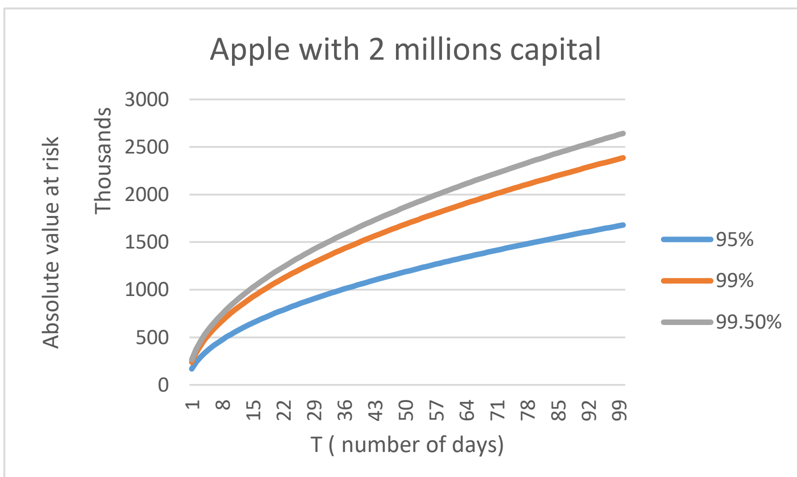


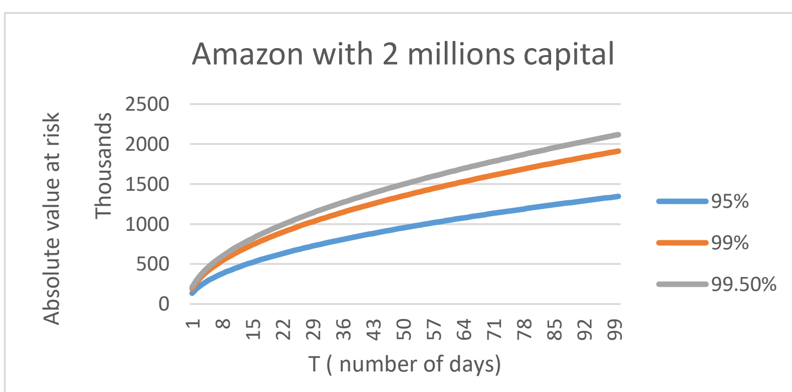


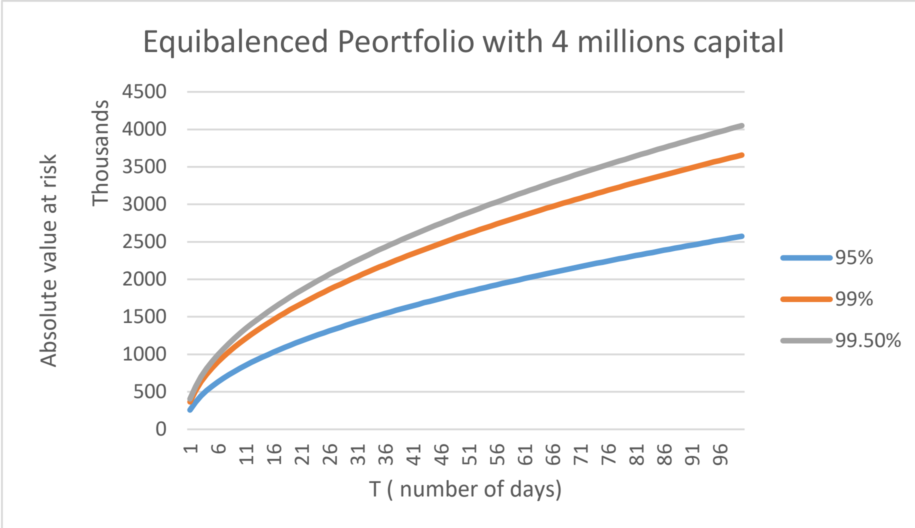


EWMA (Exponentially Weighted Moving Average)

Std (daily)			
AMZN	AAPL	Portfolio	Lambda
0.041038	0.051212	0.039242	0.94





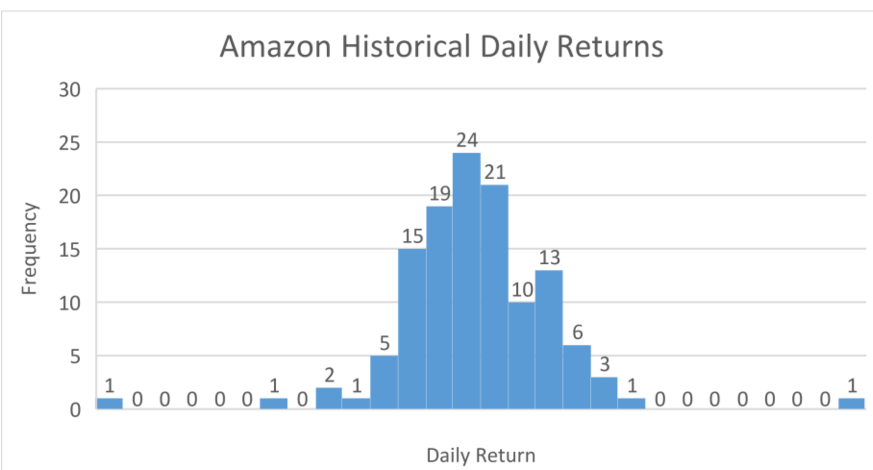


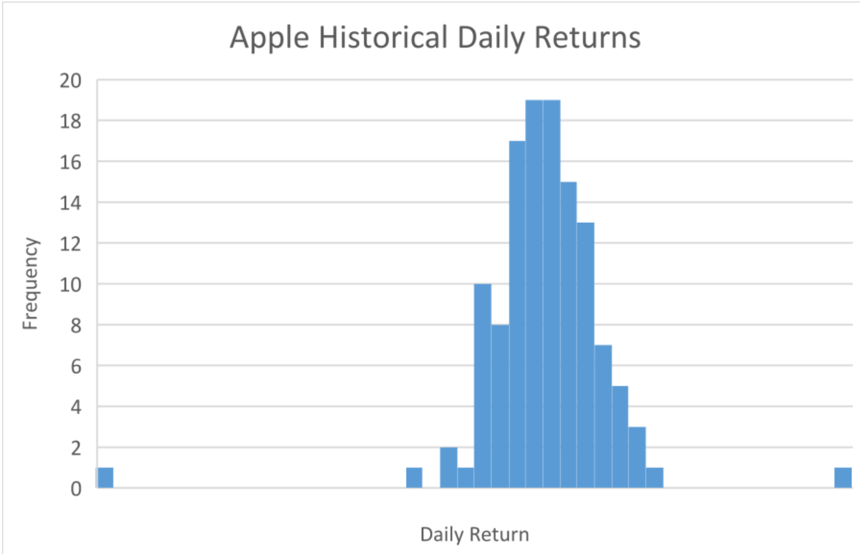
Monte Carlo

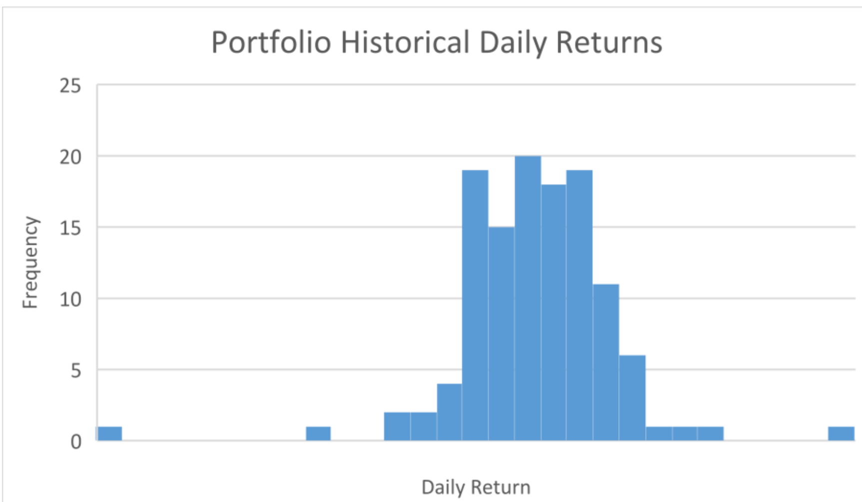
Portfolio	4000000
AMZN	2000000
AAPL	2000000
Interest rate	0
STD_prfo	0.472125
STD_AMZN	0.452598
STD_AAPL	0.609022
T(N.Days)	5

Portfolio	VaR(%)	Absolute VaR
0.95	0.116549	466196.8506
0.99	0.149181	596724.5995
0.995		
AMZN	VaR(%)	Absolute VaR
0.95	0.096019	192037.5979
0.99	0.141325	282649.5986
0.995		
AAPL	VaR(%)	Absolute VaR
0.95	0.126858	253716.2451
0.99	0.176232	352464.6746
0.995		

Historical Simulation







T(days)	1	count	123	totally
	AMZN		VaR	
	0.95	6.15	-0.03703	-74052.9
	0.99	1.23	-0.14049	-280989
	0.995	0.615	-0.14049	-280989

AAPL		VaR	
0.95	6.15	-0.04272	-85434.2
0.99	1.23	-0.2639	-527802
0.995	0.615	-0.2639	-527802

Portfolio		VaR	
0.95	6.15	-0.04932	-197294
0.99	1.23	-0.17101	-684057
0.995	0.615	-0.17101	-684057

Now, Just for comparison of different models the Absolute VaR with different level of confidece for the next 5 days has been listed as below.

AMAZON				
T=5 days	**Parametric**	**EWMA**	**Monte Carlo**	**Historical**
level of confidence				
95%	209108.3	300985.2	192037.6	165587.4
99%	297086.8	427619.2	282649.6	628310.2
95.50%	328963.1	473501		628310.2

APPLE				
T=5 days	**Parametric**	**EWMA**	**Monte Carlo**	**Historical**
level of confidence				
95%	281379.1	375604.4	253716.2	191036.6
99%	399764.2	533633.1	352464.7	1180201
95.50%	442657.4	590889.9		1180201

PORTFOLIO				
T=5 days	**Parametric**	**EWMA**	**Monte Carlo**	**Historical**
level of confidence				
95%	436260.3	575627.3	466196.9	441162.9
99%	619808.8	817812	596724.6	1529598
95.50%	686311.9	905560		1529598

SUM(AMAZON+APPLE)				
T=5 days	**Parametric**	**EWMA**	**Monte Carlo**	**Historical**
level of confidence				
95%	490487.4	676589.6	445753.8	356624
99%	696851	961252.2	635114.3	1808511
95.50%	771620.5	1064391		1808511