

$$NPV = -C_0 + \frac{C}{1+r}$$

$-C_0 =$ Initial Invest

$C =$ Cash Flow

$r =$ Discount Rate

$T =$ Time

Nº of period	year
1	2011
2	2012
3	2013
4	2014
5	2015
6	2016
7	2017
8	2018
9	2019
10	2020
11	2021

$$\frac{C_1}{1+r} + \frac{C_2}{(1+r)^2} + \dots + \frac{C_T}{(1+r)^T}$$

NPV =

ment

Nº of period	year
1	2011
2	2012
3	2013
4	2014
5	2015
6	2016
7	2017
8	2018
9	2019
10	2020
11	2021

NPV =

cash flow value	discount rate
\$116 462,00	10 %
\$125 162,00	
\$165 328,00	
\$195 670,00	
\$210 581,00	
\$216 172,00	
\$262 726,00	
\$305 903,00	
\$312 329,00	
\$307 638,00	
\$410 842,00	

\$1 392 539,88

cash flow value	discount rate
\$ 79,70	10 %
\$ 86,50	
\$ 90,50	
\$ 97,30	
\$ 82,80	
\$ 86,20	
\$ 81,90	
\$ 80,00	
\$ 73,70	
\$ 44,50	
\$ 58,00	

\$ 526,55

	Column 1	Column 2
Column 1	1	
Column 2	-0,67114741	1

$$SMA = \frac{A_1 + A_2 + \dots + A_n}{n}$$

$$EMA = (P * \alpha) + \{Previous EMA * (1 - \alpha)\}$$

P= Current price

α = Smoothing Factor = $2/1+N$

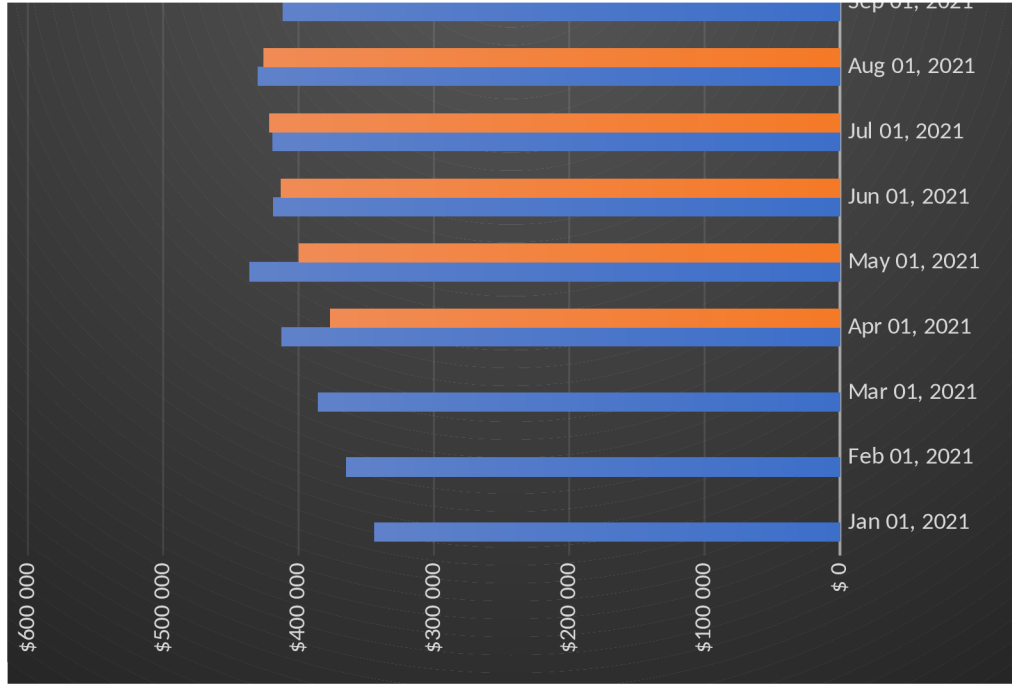
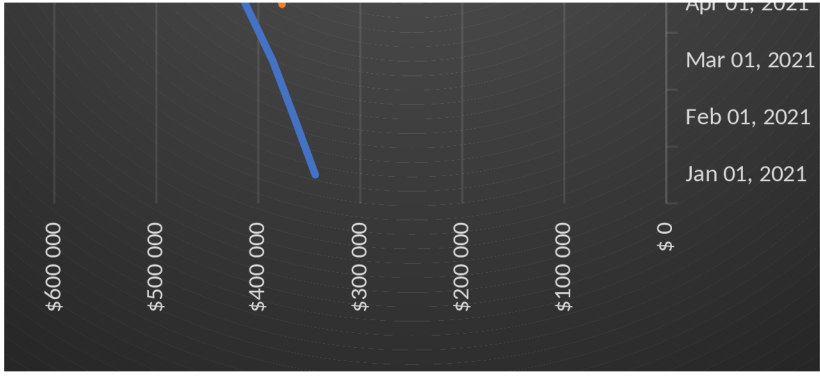
N= Number of time periods.

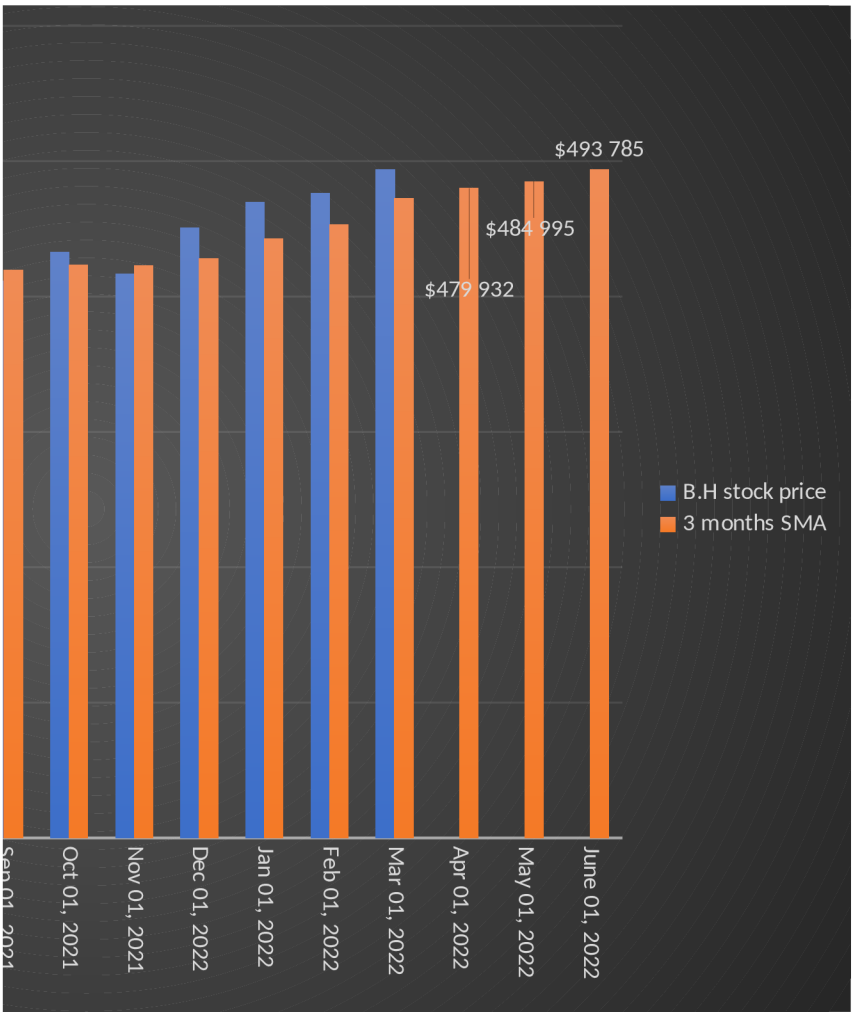
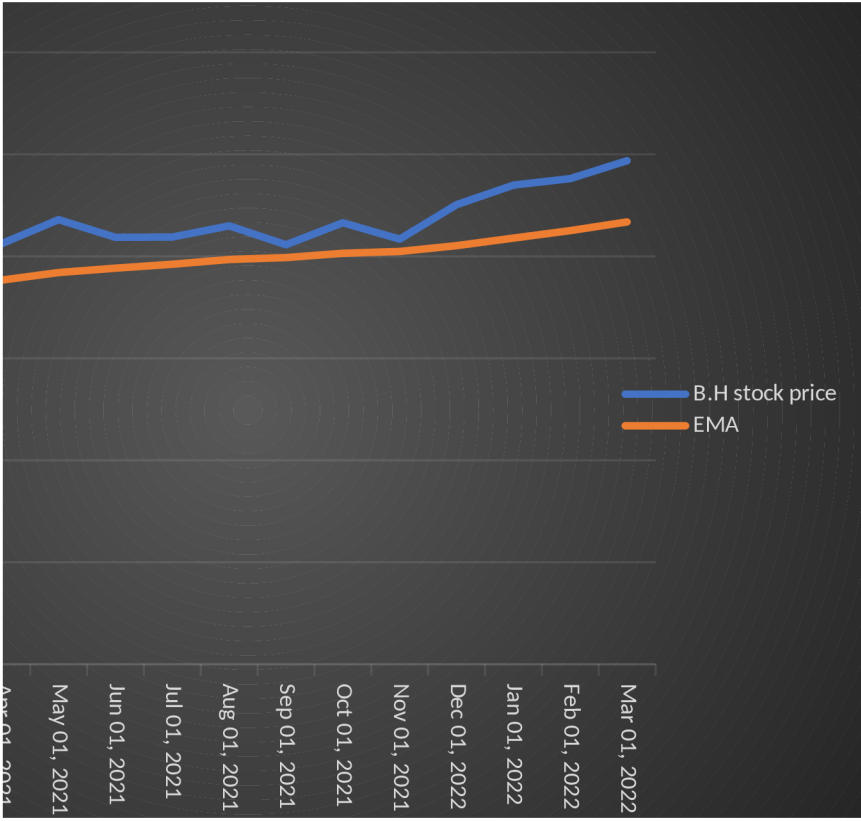
Date	Closing stock price
Jan 01, 2021	\$344 100
Feb 01, 2021	\$364 580
Mar 01, 2021	\$385 702
Apr 01, 2021	\$412 500
May 01, 2021	\$436 000
Jun 01, 2021	\$418 601
Jul 01, 2021	\$418 900
Aug 01, 2021	\$429 900
Sep 01, 2021	\$411 379
Oct 01, 2021	\$432 902
Nov 01, 2021	\$416 876
Dec 01, 2022	\$450 662
Jan 01, 2022	\$469 805
Feb 01, 2022	\$476 205
Mar 01, 2022	\$493 785
Apr 01, 2022	
May 01, 2022	
June 01, 2022	

Mar 01, 2022	493,785.00
Feb 01, 2022	476,205.00
Jan 01, 2022	469,805.00
Dec 01, 2021	450,662.00
Nov 01, 2021	416,876.00
Oct 01, 2021	432,902.00
Sep 01, 2021	411,379.00
Aug 01, 2021	429,900.00
Jul 01, 2021	418,900.00
Jun 01, 2021	418,601.00
May 01, 2021	436,000.00

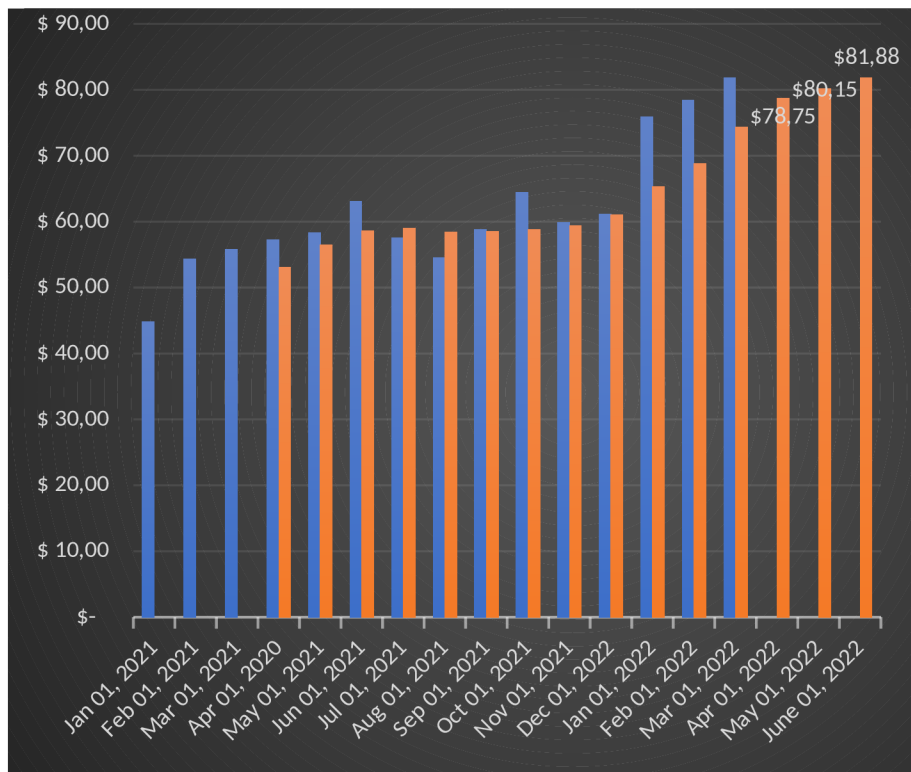
Apr 01, 2021	412,500.00
Mar 01, 2021	385,702.00
Feb 01, 2021	364,580.00
Jan 01, 2021	344,100.00

SMA	EMA	Alpha
#H/A		0,125
#H/A		
#H/A		
\$376 721	\$376 721	
\$399 696	\$384 130	
\$413 201	\$388 439	
\$421 500	\$392 247	
\$425 850	\$396 953	
\$419 695	\$398 757	
\$423 270	\$403 025	
\$422 764	\$404 756	
\$427 955	\$410 494	
\$442 561	\$417 908	
\$453 387	\$425 195	
\$472 614	\$433 769	
\$479 932		
\$484 995		
\$493 785		





$$SMA = \frac{A_1 + A_2 + \dots}{n}$$



$\frac{+ A_n}{\text{---}}$

Date	Closing stock price	SMA	EMA
Jan 01, 2021	\$ 44,84	#H/A	
Feb 01, 2021	\$ 54,37	#H/A	
Mar 01, 2021	\$ 55,83	#H/A	
Apr 01, 2020	\$ 57,24	\$ 53,07	\$53,07
May 01, 2021	\$ 58,37	\$ 56,45	\$53,73
Jun 01, 2021	\$ 63,08	\$ 58,63	\$54,90
Jul 01, 2021	\$ 57,57	\$ 59,07	\$55,23
Aug 01, 2021	\$ 54,52	\$ 58,39	\$55,15
Sep 01, 2021	\$ 58,82	\$ 58,50	\$55,60
Oct 01, 2021	\$ 64,47	\$ 58,85	\$56,71
Nov 01, 2021	\$ 59,84	\$ 59,41	\$57,10
Dec 01, 2022	\$ 61,19	\$ 61,08	\$57,61
Jan 01, 2022	\$ 75,96	\$ 65,37	\$59,91
Feb 01, 2022	\$ 78,42	\$ 68,85	\$62,22
Mar 01, 2022	\$ 81,88	\$ 74,36	\$64,68
Apr 01, 2022		\$ 78,75	
May 01, 2022		\$ 80,15	
June 01, 2022		\$ 81,88	

■ Closing stock price
■ SMA

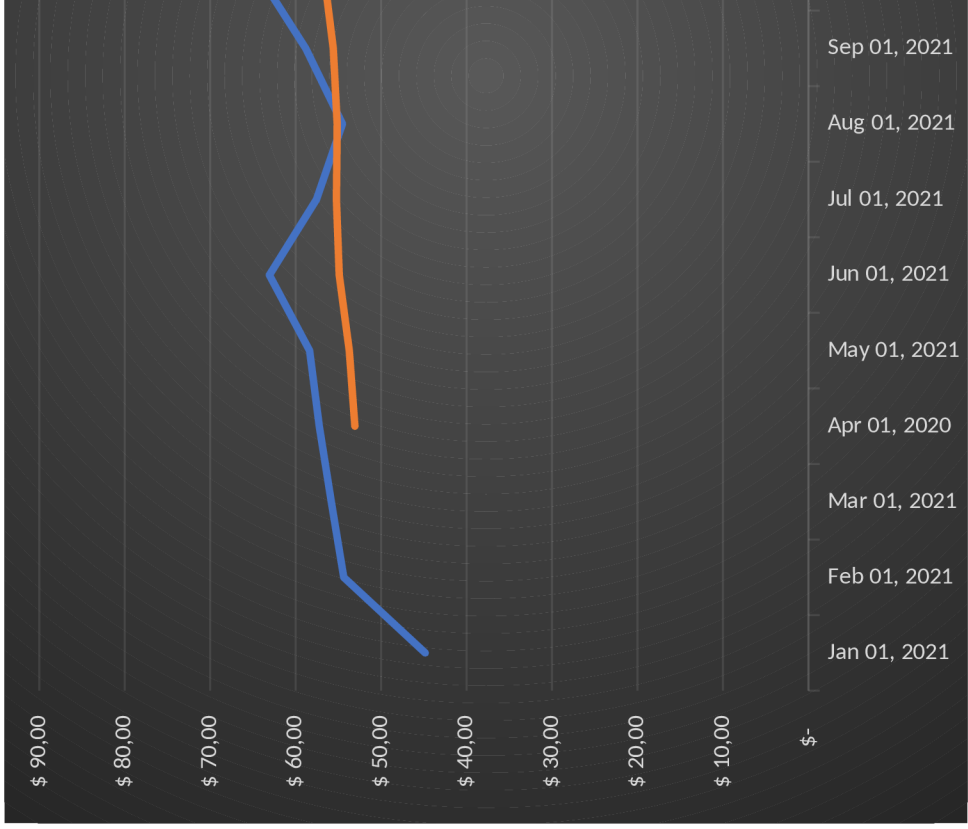
$$EMA = (P * \alpha) + \{Previous EMA * (1 - \alpha)\}$$

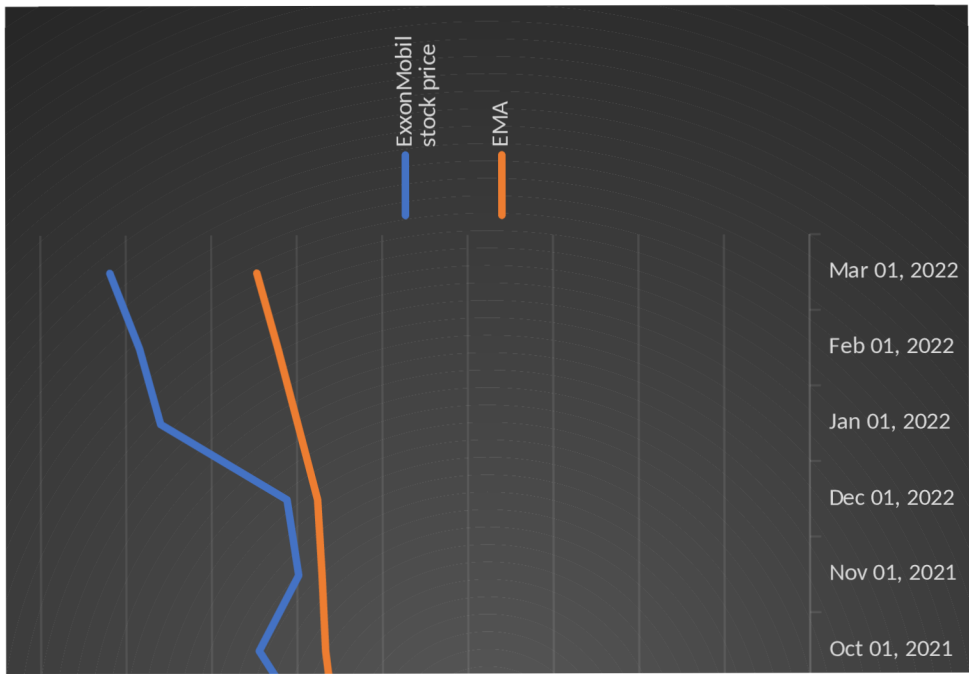
P= Current price

α = Smoothing Factor =2/1+N

N= Number of time periods.

Alpha
0,125





Berkshire Hathaway	ExxonMobil
\$116 462,00	\$ 79,70
\$125 162,00	\$ 86,50
\$165 328,00	\$ 90,50
\$195 670,00	\$ 97,30
\$210 581,00	\$ 82,80
\$216 172,00	\$ 86,20
\$262 726,00	\$ 81,90
\$305 903,00	\$ 80,00
\$312 329,00	\$ 73,70
\$307 638,00	\$ 44,50
\$410 842,00	\$ 58,00

-0,671147407416263

B.H

Year	Stock Price \$
2011	116 462
2012	125 162
2013	165 328
2014	195 670
2015	210 581
2016	216 172
2017	262 726
2018	305 903
2019	312 329
2020	307 638
2021	410 842

ExxonMobil

Year	Stock Price \$
2011	79,7
2012	86,5
2013	90,5
2014	97,3
2015	82,8
2016	86,2
2017	81,9
2018	80,0
2019	73,7
2020	44,5
2021	58,0

B.H (in billion \$)

year	total revenues
2011	\$ 143,69
2012	\$ 162,46
2013	\$ 182,15
2014	\$ 194,70
2015	\$ 210,94
2016	\$ 215,11
2017	\$ 239,93
2018	\$ 247,87
2019	\$ 254,62
2020	\$ 245,51
2021	\$ 354,64

ExxM (in billion \$)

total expenses	
\$	133,43
\$	147,64
\$	162,67
\$	174,83
\$	186,86
\$	191,04
\$	194,99
\$	243,85
\$	173,20
\$	202,99
\$	242,95

year	total revenues
2011	\$ 486,43
2012	\$ 480,68
2013	\$ 438,26
2014	\$ 411,94
2015	\$ 249,25
2016	\$ 208,11
2017	\$ 244,36
2018	\$ 290,21
2019	\$ 264,94
2020	\$ 181,50
2021	\$ 286,64

total expenses	
\$	445,37
\$	435,80
\$	405,68
\$	379,42
\$	233,10
\$	200,27
\$	224,65
\$	269,37
\$	250,60
\$	203,94
\$	263,60