

1.....	3
2.....	20
3.....	34

1

2020

16.82

-133.45

1

2

3

2020

2020

4

1

	2019	2018	2017
	%	%	%

MMRO		48,359.31	41.74	16.75	15,079.13	25.59	19.10	-	-	-
		36,758.05	31.73	10.02	20,539.61	34.85	16.59	-	-	-
		69,430.86	59.93	25.82	35,217.35	59.76	35.85	20,442.33	83.35	45.81
		46,414.69	40.07	9.45	23,715.71	40.24	16.51	4,082.85	16.65	18.37
		115,845.54	100.00	19.26	58,933.06	100.00	28.07	24,525.18	100.00	41.24

MMRO

2018

5

MMRO

2018

2018

5-12

42.75% 32.60% 24.27%

2018 MMRO

MMRO

43.31% 45.88% 40.36%

45.81% 48.40% 46.62%

2018 2017

MMRO

2019 2018

2019

2019 PBH

Power-by-the-Hour PBH

2 MMRO

MMRO

	2019			2018		
			%			%
	48,359.31	40,258.36	16.75	15,079.13	12,198.43	19.10
	36,758.05	33,073.21	10.02	20,539.61	17,131.89	16.59
	85,117.36	73,331.57	13.85	35,618.74	29,330.32	17.65

MMRO 2018 5 MMRO 2018 2018
5-12

2019 MMRO

DMH B.V. 2019

MMRO 2019 2018

PBH

1 MMRO

2 PBH 2019 MMRO

MMRO 2019 PBH PBH

PBH

MMRO

PBH PBH 2019

	2019			2018		
			%			%
PBH	4,744.14	5,817.72	-22.63	-	-	-
PBH	32,013.91	27,255.49	14.86	20,539.61	17,131.89	16.59

	36,758.05	33,073.21	10.02	20,539.61	17,131.89	16.59
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1
2018

2018

		2018		2017		2018	2017	
		A	B	C	D	E=A*B-A*D	F=A*D-C*D	G=A*B-C*D
		20.39%	45.88%	46.72%	43.31%	0.52%	-11.41%	-10.88%
		30.90%	43.98%	51.81%	41.24%	0.84%	-8.62%	-7.78%
	MMRO	47.20%	17.65%	0.00%	17.65%	0.00%	8.33%	8.33%
		78.10%	28.07%	51.81%	41.24%	-10.29%	10.84%	0.55%
		1.51%	87.82%	1.47%	77.71%	0.15%	0.03%	0.19%
		100.00%	32.60%	100.00%	42.75%	-10.15%	0.00%	-10.15%

1
MMRO
2018
5
MMRO
2018
2018
5-12
2
0
3

0

MMRO
2018
5

42.75%
32.60%
10.15%

2018
MMRO

2
2019

2019

		2019		2018		2019	2018	
		A	B	C	D	E=A*B-A*D	F=A*D-C*D	G=A*B-C*D
		21.94%	40.36%	20.39%	45.88%	-1.21%	0.71%	-0.50%
		20.56%	34.26%	30.90%	43.98%	-2.00%	-4.55%	-6.55%

	MMRO	56.95%	13.85%	47.20%	17.65%	-2.16%	1.72%	-0.44%
		77.51%	19.26%	78.10%	28.07%	-6.83%	-0.17%	-6.99%
		0.56%	88.03%	1.51%	87.82%	0.00%	-0.83%	-0.83%
		100.00%	24.27%	100.00%	32.60%	-8.33%	0.00%	-8.33%

1 MMRO 2018 5

MMRO 2018

2018 5-12

2019

MMRO 2019

2018

2019

DMH B.V.

PBH

MMRO

32.60%

24.27%

MMRO

MMRO

DMH B.V.

2017

2018

2017

2018

2019

-9,761.59

-3,975.65

19,513.60

2017

2018

	2019		2018		2017	
	30,412.59	52.77%	31,339.30	57.94%	24,740.54	65.84%
	27,223.03	47.23%	22,747.09	42.06%	12,837.53	34.16%
	57,635.62	100.00%	54,086.39	100.00%	37,578.07	100.00%

2016

2

	2019.12.31		
		%	
	18,320.27	42.34	4,258.74
	11,866.83	27.42	-
	8,816.94	20.37	-
	4,269.79	9.87	188.66

	43,273.83	100.00	4,447.41
	2018.12.31		
		%	
	14,819.82	41.54	3,434.23
	13,883.47	38.92	-
	4,464.86	12.52	-
	2,505.24	7.02	69.39
	35,673.39	100.00	3,503.62
	2017.12.31		
		%	
	11,652.44	49.69	2,453.87
	4,203.78	17.92	-
	5,228.46	22.29	-
	2,367.90	10.10	22.08
	23,452.58	100.00	2,475.95

2018

2019

2019

2019

2019

19,513.60

2019

1

2019

15.68

2018

7.24

/

2017

84.52%

104.93% 2

2019

2018

1,865.13

8,900.05

		2019	2018	2017
		7,314.91	5,544.07	8,979.44
		-482.40	-10,050.93	-14,389.77
		5,358.83	4,403.19	1,849.33
		30,993.25	20,669.27	3,353.88
		57,860.64	48,252.24	55,886.30
		73,564.10	3,490.41	-10,114.25
		6,619.10	4,958.96	6,629.12
		19,513.60	-3,975.65	-9,761.59

2017

2019

2020

2020

2020

2017

	2020 1-3	2019 1-3	2018 1-3	2017 1-3
	29,367.70	23,343.70	7,597.94	7,957.56
	29,952.24	23,668.84	7,728.07	8,132.34
	-30.83	-19.85	183.54	183.47
	16.82	30.09	197.13	183.47
	-133.45	-246.91	127.23	-75.33

2020

2.93

16.82

25.81% -44.12% 2020

-133.45

1

		2020 1-3	2019 1-3	2018 1-3
		-1,104.35	-1,143.80	-1,126.58
		-202.52	-1,234.51	-1,927.70
		5,124.76	-5,575.67	-11,141.06
		-133.45	-246.91	127.23

2020

2

2020

MMRO

DMH B.V.

2020 1-4 2019

2020 3

2020

2020

4-6

	2020		2019		
	22,000	27,000	33,446.36	19.27%	34.22%
	-500	1000	3,252.18	69.25%	115.37%

2017 2018

MMRO

2018 MMRO

20%

40% 2018 2019 MMRO

15,079.13 48,359.31

20,539.61 36,758.05

2017 2018

2019

2019

19,513.60

2020

2020 3

1

2020

2020 2

3

2020

2020

3,719

66.68%

2020 4

1.6

2

2020

4,785.77

2019

-6.75%

1-2

2020

	2020 1-3	2019 1-3
	4,785.77	5,132.39
	728.18	1,014.99

2020 1-3 MMRO DMH 2019 1-2 2019 3 DMH

2020 3

	1 MMRO 2 3 MMRO Cook sunclass Regional Jet Thomas 30% MMRO 3 MMRO MMRO 2023
	1 2 DMH B.V. Emirates BA Cityflyer Ltd British Airways Plc. Air Canada Qatar Airways Etihad Airways Delta Air Lines Inc Emirates Qatar Airways Etihad Airways
	1 MMRO 2
	1 2

MMRO

4

4

5 4

23

21

5 13

2020 3

25,000

EHM

HUMS

17

HUMS

2020 3

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1

2

1

MMRO

2 2017 2018

2019

19,513.60

3 2020

2020

4

2

2016 2018 2019 1-9

2020

2020

2020

2020

2020

2020

1

2.5

1

2

20

3

2020 1

AA- 12

		%	%	%	%	%	%
%		0.47	0.78	1.10	1.63	2.46	3.08
		25,000.00					
		116.67	193.75	275.00	406.25	614.58	770.83
2019		6,767.86					
2019		1.72	2.86	4.06	6.00	9.08	11.39
%							

1-6

2019

4

90%

2 2020

1/

/

3

1

	2019.12.31 /2019	2018.12.31 /2018	2017.12.31 /2017
	51,203.75	49,421.78	34,846.74
	146,059.96	121,382.20	73,452.26
	35.06%	40.72%	47.44%
	149,462.51	75,458.97	47,338.08
	34.26%	65.49%	73.61%

34,846.74 49,421.78

51,203.75

2018 MMRO
47,338.08 75,458.97 149,462.51
73.61% 65.49% 34.26% 2017

2018
2019
MMRO

	2019			
	30,412.59	52.77%	32,784.96	21.94%
	2018			
	31,339.30	57.94%	15,385.88	20.39%
	2017			
	24,740.54	65.84%	22,118.64	46.72%

			24,740.54	31,339.30
30,412.59			65.84%	57.94%
52.77%		50%		
	2018		MMRO	
2018	4		MMRO	MMRO
			MMRO	

	2019.12.31	2018.12.31

	51,203.75	49,421.78
MMRO	9,296.85	7,694.60
MMRO	41,906.90	41,727.18
	22.18%	18.44%

MMRO

MMRO

	2018	2019	
41,727.18	41,906.90	MMRO	7,694.60
9,296.85		18.44%	22.18%
	MMRO		

2

	2019	12	31	
1		12,383.77	21.49%	1,656.54
2		5,744.04	9.97%	342.43
3		2,681.58	4.65%	392.07
4		2,599.76	4.51%	128.95

		25,320.49	46.81%	2,414.29
	2017 12 31			
1		9,804.83	26.09%	517.64
2	B	3,698.54	9.84%	184.93
3	Chabok Aviation FZCO	3,339.66	8.89%	225.97
4	A	2,474.32	6.58%	255.77
5		1,472.31	3.92%	105.33
		20,789.65	55.32%	1,289.63

	2019	2018	2017
	82.07%	85.64%	82.67%
	75.33%	114.83%	136.98%
	103.62%	99.42%	89.04%
	34.26%	65.49%	73.61%
	73.82%	91.35%	95.58%
	2019	2018	2017
	1.25	1.24	1.28
	1.35	0.88	0.77
	1.03	1.12	1.64
	2.97	1.79	1.61
	1.65	1.26	1.33

Wind

2019

4 2020

2020 011450

2020 12

		5,640.78	7,729.89	-27.03%	5,150.80
MMRO		14,154.97	7,434.08	90.41%	8,289.65
		12,292.28	8,587.98	43.13%	12,288.55
		36,558.87	26,181.98	39.63%	41,952.59

1

4

2

2020

2020

1-4

2019

83.98%

2019

1-4

2020

2019

2020

3

2020

2019

2020

MMRO

DMH B.V.

2020

1-4

2019

2020

3

2020

	2020 3	2019
--	-----------	------

	31,625.26	37,264.53
	4,690.22	5,536.20
	2,599.95	2,624.06
	1,109.44	1,109.44
	40,024.87	46,534.23

MMRO

1

	2020 3	2019
	31,625.26	37,264.53

2018 4 2019 3 MMRO
DMH B.V.

2020 3 31,625.26
2020
5,639.27
5.47 2.52

2

2020 3 4,690.22 MMRO
600
MMRO
2020 3

	2020 3
MMRO	4,251.06
	439.16
	4,690.22

MMRO 600

3

2020 3

		1,563.10
Luminor		783.25
Luminor		253.60
		2,599.95

2020 3

2,599.95

2018 1.2 2+1 2020

12

2020

2020 12

4

2020 011450

2020 12 2020 MMRO

MMRO 2020 1,109.44

MMRO

2017	47,338.08	2019	149,462.51	2017
2019		77.69%		
		2017	84.52%	
2019	104.93%			

4 MMRO

MMRO

2019	6	5,952.38
MMRO	895	

MMRO

2020

2020

2020

1			
2			

/2

1

2

3

MMRO DMH 2019 808.30
44.01 MMRO 2019 43.90%.

1 2019

MMRO DMH

2 2020
2020

2019

MMRO DMH

MMRO

1 MMRO 2019

MMRO 2019

	2019
	77,515.37
	2,200.07

MMRO 2019 DMH
MMRO DMH MMRO DMH

2 MMRO

2019 12 31

MMRO DMH

2020 124

MMRO

MMRO 100%	2020	53,619.63	45,782.71	-25.72%	14.62%	2025	12.94%	33,239.23
	2021	77,941.50	66,443.90	45.36%	14.75%			
	2022	80,279.74	68,277.97	3.00%	14.95%			
	2023	82,688.14	69,962.29	3.00%	15.39%			
	2024	85,168.78	72,048.02	3.00%	15.41%			

2019

72,183.37

2019

PBH

2018 4

MMRO100%

MMRO

MMRO100%

2019 MMRO

PBH

1

2019

2019

MMRO	
2019	8.29%
2020	-25.72%
2021	45.36%
2022	3.00%
2023	3.00%
2024	3.00%
2020-2024	3.36%

1

2019

72,183.37

2019

PBH

3

MMRO

MMRO	2020	2019	25.72%	2020	1
MMRO					

2027 5,300

3.7%

MMRO

2021-2024 MMRO

45.36% 3% 3% 3% 2025

0

2021 45.36%

2020 2021 2019
2021 2019 7.98% 2019

2

2019

MMRO	
2019	16.62%
2020	14.62%
2021	14.75%
2022	14.95%
2023	15.39%
2024	15.41%

MMRO 2019 16.62%

14.62%-15.41% 2019

MMRO

MMRO

MMRO

3

WACC

WACC

WACC $R_e \times W_e$ $R_d \times (1 - T) \times W_d$

R_e

R_d

W_e

W_d

T

CAPM

R_e

R_e R_f R_m R_f R_c

R_f

R_m

R_m R_f

R_c

a R_f

90%

Rf

	%	%	%
	0.09%	0.09%	0.04%
	4.42%	4.43%	4.40%
	2.06%	2.06%	2.06%
	0.28%	0.28%	0.28%
	1.71%	-	-

Rf 0.09%+4.42%+2.06%+0.28% /4=1.71%

b

36

A

24

/

t

39

MMRO

MMRO Wind

5 AAR UNITED TECH CORP SPIRIT

AEROSYSTEMS

		β_u
AAR	AIR.N	1.0188
	HEI.N	0.663
UNITED TECH CORP	UTX.CHL	0.7281
SPIRIT AEROSYSTEMS	SPR.N	0.8843
	SAF.PA	0.7569
	-	0.8102

$$1 \quad D/E \times \quad 1 \quad T$$

D

E

T

0.8102

19.87%

$$D/E \times \quad 1 \quad T \quad]$$

$$0.8102 \times [1 \quad 16.50\% \times \quad 1 \quad 19.87\% \quad]$$

0.9173

c

ERP

MRP

ERP

Aswath

Damodaran

=

+

=

+

(/)

Aswath Damodaran 1928

500

6.26%

Moody s Investors Service

A1

0.79%

/

1.23

MRP =6.26%+0.79% 1.23=7.24%

MRP 7.24%

d

Rc

Rc=3.00%

1		
2		
3		

4		
5		
6		

$$\begin{aligned}
 R_e &= R_f + \beta (R_m - R_f) + R_c \\
 &= 1.71\% + 0.9173 \times 7.24\% + 3.00\% \\
 &= 11.35\%
 \end{aligned}$$

WACC

$$\begin{aligned}
 WACC &= R_e \times W_e + R_d \times (1 - T) \times W_d \\
 &= 11.35\% \times 85.84\% + 5.56\% \times (1 - 19.87\%) \times 14.16\% \\
 &= 10.37\%
 \end{aligned}$$

WACC

8 --

WACC

ISA36--BCZ85

WACC

$$\begin{aligned}
 WACC &= WACC / (1 - T) \\
 &= 10.37\% / (1 - 19.87\%)
 \end{aligned}$$

=12.94%

4

		MMRO
1		28,039.88
2		-
3	-	28,039.88
4		-
5	= +	28,039.88
6		6,007.64
7	= +	34,047.52
8		33,239.23
9	0 = -	808.30

MMRO

808.30

DMH

1 DMH 2019

DMH 2019

	2019
	8,863.90
	-148.23

DMH 2019 2019

DMH 2019 3
DMH 2019 3-12

2 DMH

DMH

DMH 100%	2020	7,923.44	6,663.53	-10.61%	15.90%	2025	12.94%	6,069.38
	2021	11,509.59	8,460.81	45.26%	26.49%			
	2022	13,236.03	10,108.08	15.00%	23.63%			
	2023	14,294.91	11,144.52	8.00%	22.04%			
	2024	15,009.65	11,764.52	5.00%	21.62%			

1

2019

2019

DMH	
2019	32.09%
2020	-10.61%
2021	45.26%
2022	15.00%
2023	8.00%
2024	5.00%
2020-2024	11.11%

2020-2024

2019

2020

DMH

MRO

DMH

7

6

DMH

2020

2019

10.61%

2019

DMH

SXF

2019 6

A330/B787

A380

B787

2020

2020

DMH 2021

2

2019

DMH	
2019	15.47%
2020	15.90%
2021	26.49%
2022	23.63%
2023	22.04%
2024	21.62%

DMH 2017 2018 2019 36.30% 36.92%

15.47% 29.56%

15.90%-26.49% 2017 2019 2019

DMH 15.47%

SXF

DMH

DMH 2019

DMH

58.44%

2020 DMH

DMH

2021-2024 DMH

48.29%- 53.27% DMH

DMH

1 2020

2020 MMRO DMH

	2020 1-3	2020	2020 1-3 2020
MMRO	18,714.36	53,619.63	34.90%
DMH	2,245.89	7,923.44	28.34%
	20,960.25	61,543.07	34.06%

DMH

2020 MMRO DMH MMRO
DMH MMRO 2020 1-3
18,714.36 2020 34.90% DMH 2020
1-3 2,245.89 2020
28.34%
2020 2020 3
2020

2 2020 4

2020 4

8,289.65 12,288.55 20,578.20 2020
33.44%

DMH

DMH

2020 4 DMH EastJet Emirates BA Cityflyer Ltd
British Airways Plc. Air Canada Qatar Airways Etihad Airways Delta Air Lines
Inc

3

2020	MMRO	DMH
MMRO	DMH	

2019 6

SAPPHIRE INVESTMENT HOLDING LIMITED

MMRO				800.00
MMRO	13.44%			95.00
MMRO		1.60%		MMRO
5,952.38		2018	4	MMRO
4,344.42	37.01%	MMRO		

2020 3

MMRO

DMH

2027

2027 5,300

3.7%

2020

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	1 MMRO 2 3 MMRO Thomas Cook sunclass Regional Jet 30% MMRO 3 MMRO MMRO 2023
	1 2 DMH B.V. Emirates BA Cityflyer Ltd British Airways Plc. Air Canada Qatar Airways Etihad Airways Delta Air Lines Inc Emirates Qatar Airways Etihad Airways
	1 MMRO 2 1 2

2020

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2018	MMRO	4,344.42	
33,717.49		25,268.30	2019 3

2

1 2020 3

MMRO

DMH

2 MMRO DMH

8

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2020

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2020

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2020

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2020