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BJORKLUND FUND

April 7th, 2019
Manhattan Associates (Nasdaq:MANH)
Thomas Soussan

Sector: Technology
Industry: Software - Application
Current Price: $56.55
Target Price: $59.37

Company Description: Manhattan Associates, Inc develops, sell, deploys, services and maintains software solutions to manage supply chains, inventory, and omni-channel operation for retailers, wholesalers, manufacturers, logistics providers, and other organizations

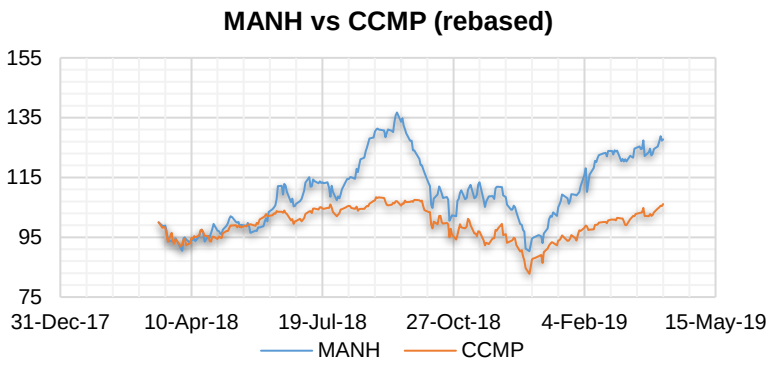
BUY

Current Price:	$56.55
Target Price:	$59.37
Market Cap:	3.653B
Beta:	1.73

Other key Metrics/Ratios

P/E Ratio: 35.79 **EPS: 1.58**

NOPAT: 99.31 **ROIC: 67.15%**



Thesis: I am recommending a BUY on Manhattan Associates Inc. Providing supply chain solutions for its customers across the world; the company maintains its capacity to generate cash from its operations while keep beating estimates. In addition, being priced at its fair value, the company is evolving in an emerging industry where demand from worldwide renown companies keep increasing for the technologies proposed by Manhattan Associate.

Catalysts: Forward looking projections

- Short Term: Beat estimate on each Quarter.
- MidTerm(1-2years): Transition from the software licensing to Cloud subscription to stimulate revenue.
- Long Term(3+): Significant increase R&D to create or improve existing products to increase the company's market shares

Macro-economy outlook

The macroeconomic context is a significant variable to take into account for an internationally exposed company like Manhattan Associate Inc. In fact, their operations could be harmed by any political decision taken in a country they operates in. The latest release from both the IMF and WEO (World Economic Outlook) have shown a potential weakening economy for the upcoming quarters and for the year 2020. In fact, the revised global economy projections from October 2018 announced a decrease of 0.2 and 0.1 percentage point from the initial 3.5% growth for 2019 and China, the S&P 500 that has rallied by 22.7% from a 15.74% drop from December 2018, and almost reached its all-time high at 2,879.39 on April 4. Finally, with a systematic risk of 59.5% - the variance associated with market movements on MANH historical performance, the company

is therefore highly impacted by the market fluctuations and is dependent to the global economy. By operating mainly in advanced and emerging economies for which forecasts suggest respectively a 2.0% and 1.7 % growth for 2019 and 2020 and 4.5% and 4.9% for the same time horizon. Manhattan Associate may therefore be subject to the global economic downturn since it will affect customer's behavior regarding decision-making and budget. The company generates 69% of its revenue from the United States, 15% from EMEA (Europe Middle East & Africa) and the remaining balance from APAC (Asia –Pacific) Canada and Latin America.

Multiples Analysis & Earnings Performance

For the multiples analysis, the analysis will be more relevant by using the competitors to evaluate Manhattan Associates' performance. The current EV/EBITDA ratio of the company is 26.8x and gives an insight of the company financial performance over its value. In this case, in comparison to its peers (Tyler Technologies Inc, Guidewire Software Inc, Cornerstone OnDemand Inc and Verint System Inc), MANH is fairly priced. However compared to the other competitors, the company remains fairly priced. The relative valuation shows a different vision compared to the EV/EBITDA ratio. Despite this metric is less relevant than EV/EBITDA, MANH has a higher P/E ratio than most of its competitors that is a significant indicator of a potential growth. The company's P/E remains superior to the industry, which will tend to attract customers over a longer time horizon.

MANH US Equity | Export | Settings | Equity Relative Valuation

Comp Source Analyst Curated (BI) | Name BI GL Sml App Sftware PB | Curr USD

vs Comps | Group Dynamics | vs Self

Analysis of MANH US Multiples - Premium to Comps (3M 6M 1Yr 2Yr 5Yr)

Metric	Current	Hist Avg	Diff	# SD	3M Trend	1Yr Historical Premium Range Low	Range (Current / Hist Avg)	High	Implied @ Hist Avg Multiple	Price (USD)
Current Price										56.07
11) BF P/E	5%	-7%	11%	1.3		-24%		6%	35.2x	49.90
12) BF EV/EBITDA	27%	14%	13%	1.1		-9%		28%	24.1x	50.53
13) BF EV/EBIT	--	--	--	--		--		--	--	--
14) BF EV/Rev	0%	-6%	6%	0.9		-21%		4%	5.8x	52.87
15) LF P/BV	--	--	--	--		--		--	--	--

9) View All Comps Below

Summary of Current Multiples

Name	Mkt Ca...	Mkt Cap (M)	BF P/E	BF EV/EBITDA	BF EV/EBIT	BF EV/Rev	LF P/BV
1) Manhattan Associates Inc		3.62B	39.6x	26.8x	--	6.1x	24.7x
Current Premium to Comps Mean			5%	27%	--	0%	--
Mean (Including MANH US)		4.10B	37.8x	21.1x	34.2x	6.1x	5.1x
2) Tyler Technologies Inc	0.44	8.01B	38.7x	24.5x	27.0x	6.9x	6.0x
3) Guidewire Software Inc	0.44	8.14B	66.3x	44.9x	54.3x	9.1x	5.4x
4) Cornerstone OnDemand Inc	0.41	3.18B	48.9x	22.6x	36.0x	5.3x	56.6x
5) Verint Systems Inc	0.36	4.00B	16.6x	12.9x	--	3.2x	3.2x

Grey values are excluded from group stats. | 10) Analyze List

MANH US Equity | 97) Actions | Earnings & Estimates

Manhattan Associates Inc | Periodicity Quarters | Source Standard | Cur USD

1) Earnings History | ERN »		2) Consensus Overview | EEO »		3) Analyst Coverage | ANR »	
Next Announcement	(C) 04/23/19	Trailing 12M P/E	35.72	Buy/Hold/Sell	1/3/0
Prior Announcement	02/05/19	Forward 12M P/E	40.10	Current Price	56.14
Avg/Implied 1 Day Move	7.59% / 2.37%	Est. LTG (EPS)	N.A.	Target Price	55.00

4) Consensus Overview | EEO » | 21) Current Period Overview (Q1/19) | 22) Prior Period Analysis (Q4/18)

Measure	Q1/19 Est	4Wk Chg	YoY Gr Growth vs Comps		Past Surprise
11) EPS, Adj+	0.340	0.00%	-8.1%	Weaker	Beat 8 of 8
12) EPS, GAAP	0.263	0.00%	-20.2%	Weaker	Beat 7 of 8
13) Revenue	137.500M	0.00%	5.3%	Weaker	Beat 5 of 8
14) Net Income, Adj+	22.175M	0.00%	-11.0%	Weaker	Beat 7 of 8
15) Operating Profit	29.067M	0.00%	--	--	--
16) EBITDA	31.325M	0.00%	-9.2%	Weaker	Beat 8 of 8

5) Earnings Trends | EM » | Q1s Only | 6) Earnings Estimates Graph | EEG »

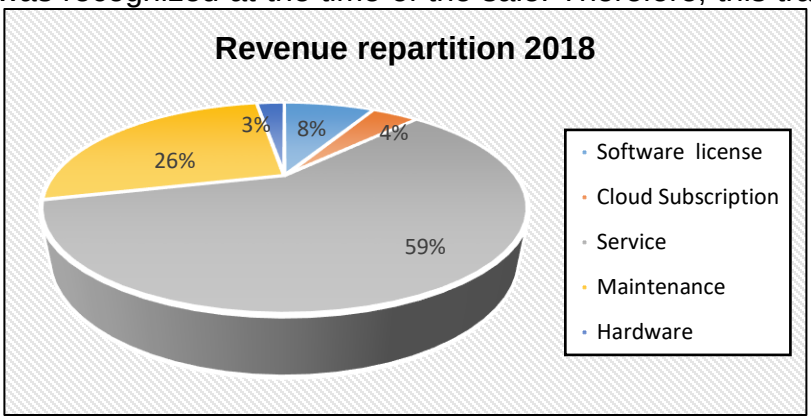
Additionally, the company is performing well regarding its earnings. Indeed, for the past four quarters, the company has beaten all the Wall Street's estimates delivering then a good surprise to its shareholders despite a decrease in revenues and EBITDA. The company beat by $0.06 for both Q1 and Q2 while it outperformed the estimates by $0.09 for the last two quarters of 2018. Considering the negative growth in revenues for 2018, the estimates forecast a YoY earning of negative 8.11%. However, considering the surprise from the past year, it may not be impossible that MANH beats once again the estimates on April 23.

Competitive advantage/ Growth potential

Manhattan Associates has an advantage compared to most of its competitors, which will in the future be growth incentive for the company. In fact, the company has no debt and only uses cash to finance its operations. Its cash has decreased by 21.02% mainly caused by an increase of in R&D 24.59% from $57.7M in 2017 to $71.9 in 2018. Using cash to finance its operations, the company has no debt and is not willing to issue some anytime soon. However, the company DOL remains a good indicator to foresee a potential growth in Net income relative to an increase in sales. MANH has a Degree of Operating Leverage (DOL) of 1.017, which suggests that an increase of 10% in sales will have a positive impact on the company's EBIT of 1.7%. MANH is also pursuing for several years a shares repurchase program and plan on buying, for 2019, $50M of their common stock. This initiative will increase their price per share and will benefits to the shareholders, and thus will increase demand for this stock. The previous 2018 stock buyback allowed the company to repurchase 3 million at an average price of $45.52 a share. The company also provides to its customer products different to its competitors. Despite its main competitors relies on ERP (Enterprise Resource Planning), MANH focuses on Omni-channel while using its commerce expertise to penetrate the market; in fact, the company has developed an application that helps its customers to know in real time their inventory, regardless of location, and give access to a portfolio of solutions and services. Being present in the company's cloud subscription, the more customer will shift from their traditional software license subscription to the cloud's will drive the company's revenue up thanks to higher demand while delivering a greater customer satisfaction. Finally, MANH is dealing with large retailers like Puma (PUMSY), PCM Inc, Lacoste, DHL and DELL. These large retailers/customers represent, for the company's top 5 customers, 13%, 9% and 12% of their revenues for the years 2018, 2017 and 2016 respectively.

Threats/ Downside

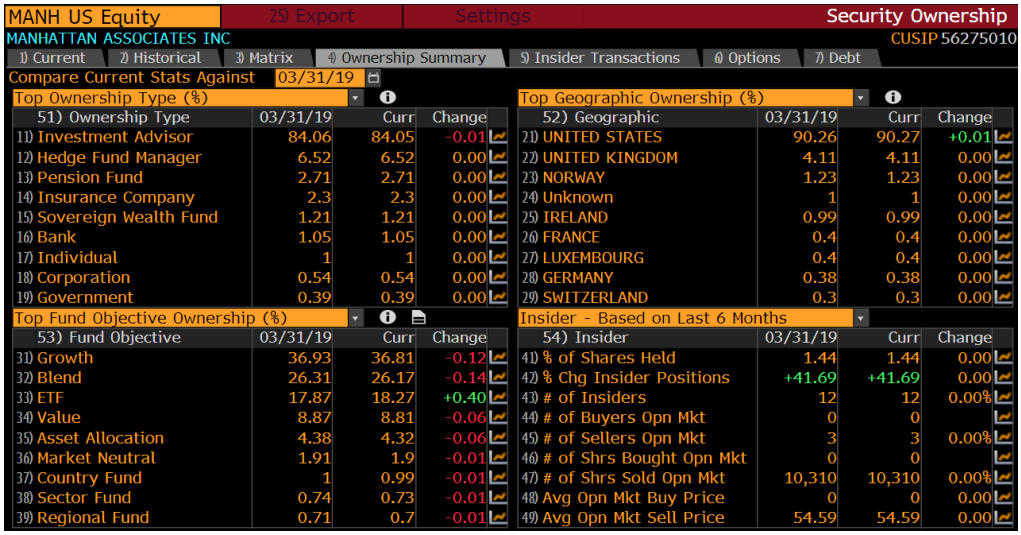
As mentioned in the macro-economic outlook, Manhattan Associates Inc is subject to market volatility and global economy. Demand for their goods is still expected to grow in the coming quarter, which should drive their revenue up. Having COGS pretty much constant, the company need to generate more revenues to keep a comfortable gross margin. However, they are experiencing 5.96% decrease in revenue mainly due to their transition from their traditional software licenses to cloud subscription. The revenue recognition from these products differ since the cloud's revenue recognition is done from a periodic payment fee for the right to use the company's software within the cloud-based environment provided, while the software licensing was recognized at the time of the sale. Therefore, this transition will have an adverse impact on the company's revenues, earnings and cash flow as long as the company will keep selling first its software license or will be unable to have an increasing growth in demand for the clouds. In addition, evolving in a high competitive industry, MANH might lose market share if it is not able to sustain a substantial R&D to beat competitors on their technologies. In

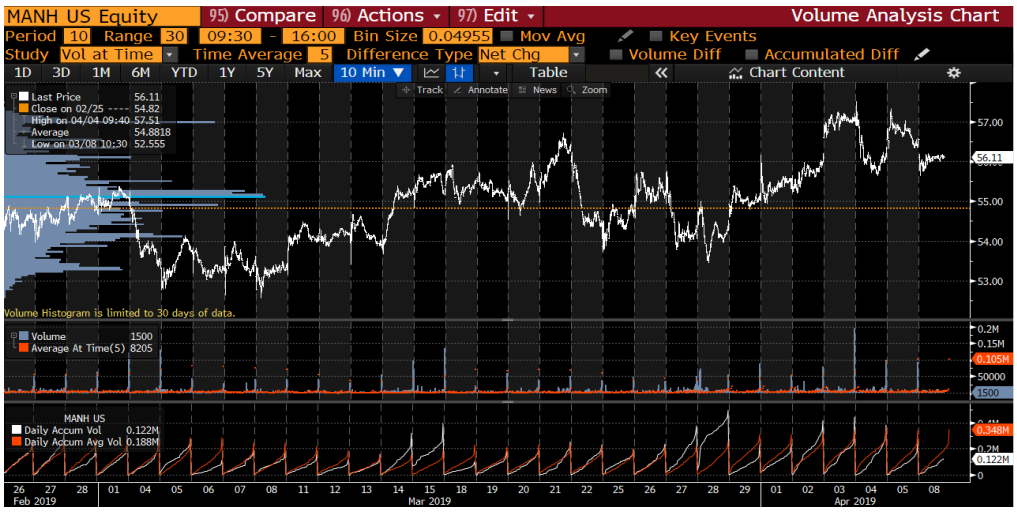


fact, some competitors are willing to broader their products offering through acquiring other specialized companies/developers that will end up with competitors having better and advanced technologies or more attractive prices than Manhattan Associates. Finally, by having no debt, the company cannot reach an optimal cost of capital, which is affecting somewhat its ROE and ROI. The current ROE of 65.00, which remains 4 times superior to the industry and 3.67 time superior to its sector, prove a strong ability to generate return over the equity issued but could be largely increase with a certain increase in debt. By leveraging more, the company is most likely to generate additional returns.

Ownership

Ownership function provides a better view of the various shareholders of the company. Hedge fund Managers and Investment Advisors mainly target Manhattan Associates, which can be a risk for the company. In fact, with a total of 200M shares outstanding and 91.69M of floating shares (45.84%), the company is for the moment safe from Hedge Fund Operations, but these latter could be a threat if they have a decisional power on the company management. In case of a potential acquisition, the company stock price would rally quite rapidly, which would guarantee us a great return on investment. It is therefore essential that the company does not allow more floating shares. As of today, surprisingly, Government agencies have a certain percentage of the company shares at 0.39%. Then, in looking at the current Short Interest from investors to the company show on averages a short position over 22.95 days while it used to be significantly higher for the past months reaching up to 26.52 in Augusts. However, the IGPV function that show the intraday volume of the stocks traded at a specific price is near $55 a share with some incentive to reach $57 a share. If the company beats its estimates on April





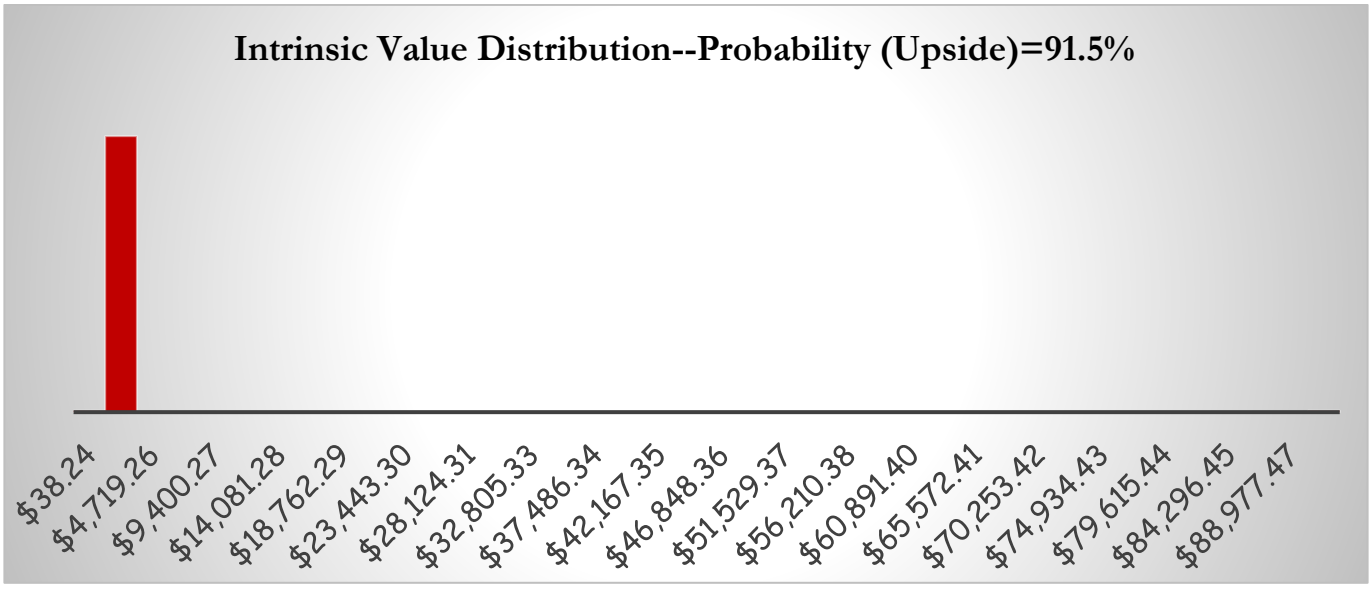
23, considering the historical pattern, the stock will keep increasing up to reach a target price at $59.37.

Base/Best/Worst case

The company valuation is done on the following criterions:

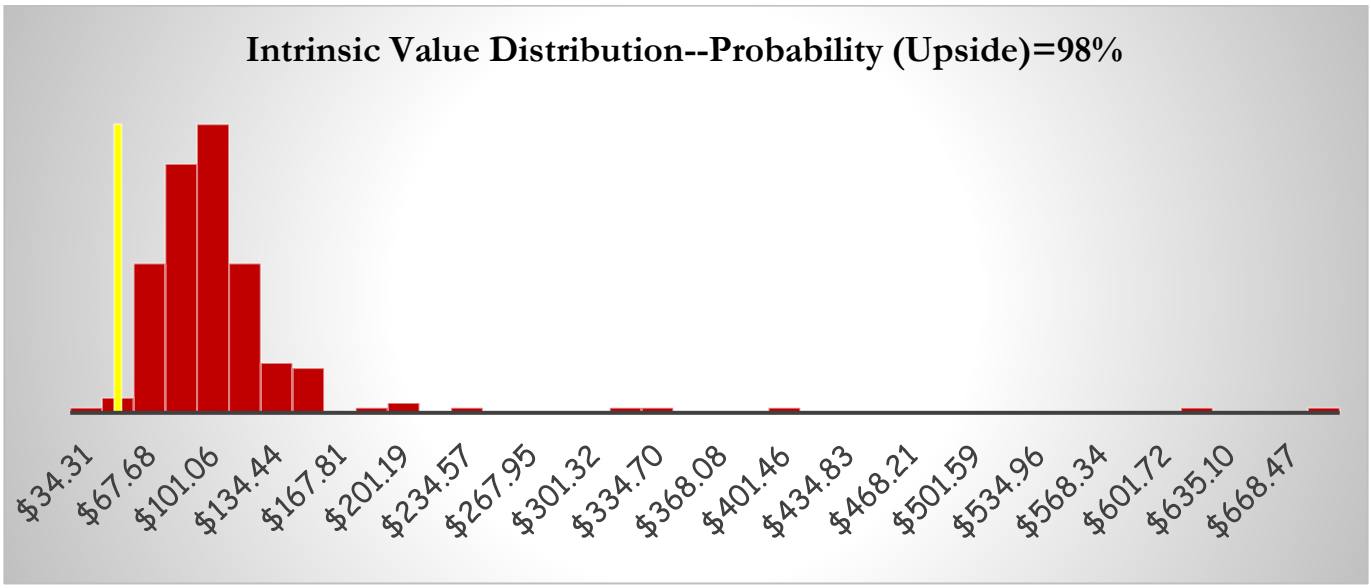
- 50% DCF
- 25% EV/EBITDA
- 25% EV/REV

Base case:



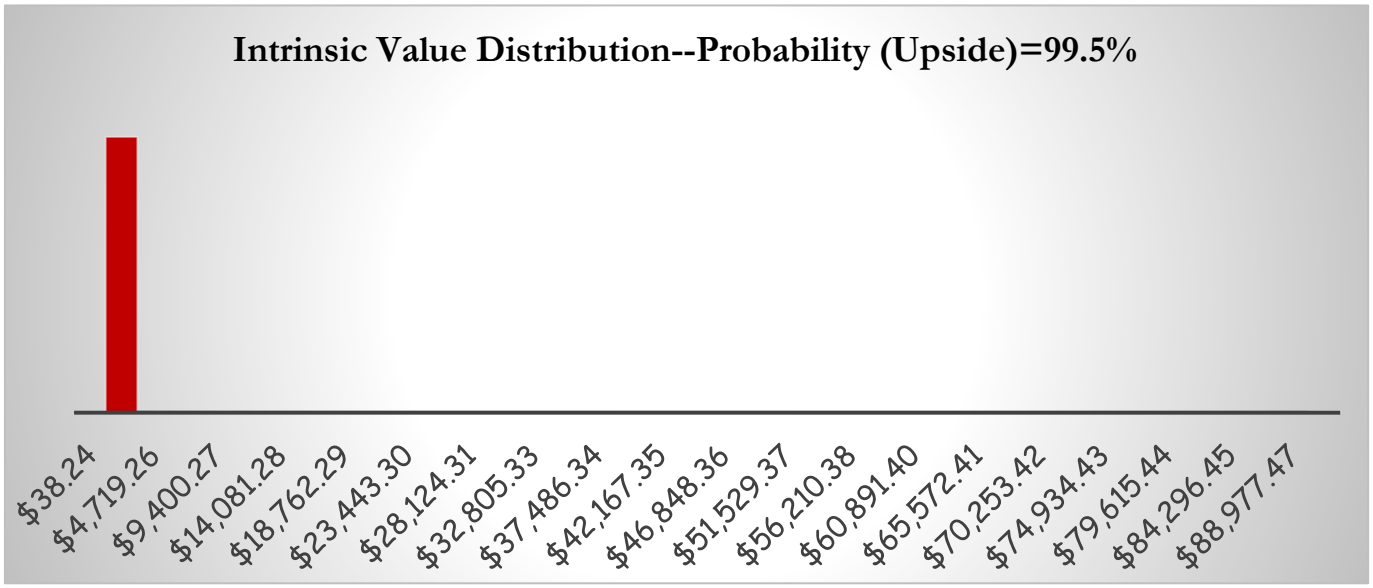
- Expected constant growth by year 15
- Based on revenue expectations, by year 4, the growth in revenue will reach 12% and continue, thereafter, on an average at 14.4%.

Worst Case:



- Expected constant growth from year 12
- Inability to have a growth up to year 8 due to various factors (Cloud subscription, international exposure)

Best case:



- Expected Constant growth from year 12
- Strong increase in revenue growth for the 11 first year of 15%.

Conclusion

Manhattan Associates Inc is a BUY. While it has an international exposure due to the global macroeconomic context, the company will be able to develop its products. Being present in US, it expects a significant shifting in demand for their cloud operations from their current software licensing. This key component of their products will allow them to have a competitive advantage comparted to its competitors and catch the decrease in revenue from the past year. In addition, no analyst has predicted yet a downgrade for MANH but rather BUY and HOLD. Since the company keeps surprising its shareholders regarding their estimates, the company will surely beat the upcoming ones on April 23. Some key metrics and technical analysis have shown a priced stock that will tend to increase in the coming quarters to reach a target price of $59.37 per share and beyond.

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Manhattan Associates, Inc.	Symbol: MANH
Analyst	TS
Buy below	$49.44
Sell above	$68.46
Probability of Price Increase	92%
Last Price	$56.14
Intrinsic Value	$54.77
Target Dividends	$0.00
Target Price	$61.80

Quarterly Earning Surprises (Actual Vs. Median Estimates)	
Revenue	
12/31/2017	-0.86%
3/31/2018	0.67%
6/30/2018	0.96%
9/30/2018	0.03%
12/31/2018	3.62%
Mean (Standard Error)	**0.88% (1.01%)**
EBITDA	
12/31/2017	-34.86%
3/31/2018	1.16%
6/30/2018	-13.92%
9/30/2018	-6.49%
12/31/2018	-9.76%
Mean (Standard Error)	**0.88% (4.88%)**

Financials

Profitability	MANH (LTM)	MANH Historical	Peers' Median (LTM)
Return on Capital	18.2%		
Adjusted EBITDA Margin	23.1%	32.11%	64.63%
Return on Equity	21.6%		
Adjusted Net margin	24.3%		
Invested Funds	**MANH (LTM)**	**MANH Historical**	**Peers' Median (LTM)**
Cash/Capital			
NWC/Capital			
Operating Assets/Capital			
Goodwill/Capital			
Capital Structure	**MANH (LTM)**	**MANH Historical**	**Peers' Median (LTM)**
Total Debt/Market Cap.			
Reported Cost of Borrowing			5.9%
Cash Interest/Total Debt			5.0%
CGFS Credit Rating	BBB		BB
Credit Model Rating	b+		b+ to bb-
Probability of Default	0.01%		0.01%

Cost of Capital	CGFS Credit Rating	Credit Model Rating	Probability of Default
Implied Cost of Borrowing (MANH)	4.9%	6.7%	3.7%
Implied Cost of Borrowing (Peers)	5.3%	7.1%	4.2%
Cost of New Debt Estimate	0.0%		
Market Risk Premium Estimate	11.5%		
Cost of Equity Estimate	11.5%		
WACC Estimate	11.3%		

Valuation

DCF Valuation

	Revenues	EBITDA Margin	UFCF	WACC	ROIC	Price Per Share
Base Year (Actual)	$559.16	23%	$122.91	11.25%	18.15%	$53.30
year 1	$573.14	23%	$107.31	11.26%	16.55%	$59.39
year 2	$591.86	23%	$109.85	11.26%	14.22%	$65.94
year 3	$635.19	24%	$126.08	11.25%	14.23%	$73.00
year 4	$717.21	27%	$154.68	11.24%	15.36%	$80.57
year 5	$808.68	29%	$184.72	11.22%	15.59%	$88.67
year 6	$921.90	30%	$214.28	11.20%	15.54%	$97.31
year 7	$1,050.97	33%	$266.81	11.18%	16.23%	$106.48
year 8	$1,208.61	32%	$293.28	11.17%	15.46%	$116.17
year 9	$1,353.64	35%	$362.19	11.16%	15.74%	$126.39
year 10	$1,529.62	33%	$383.89	11.14%	14.53%	$137.10
year 11	$1,759.06	32%	$416.70	11.12%	13.96%	$148.30
year 12	$2,005.33	32%	$473.53	11.11%	13.73%	$159.99
year 13	$2,326.18	30%	$499.22	11.09%	13.04%	$172.14
year 14	$2,744.89	28%	$530.41	11.06%	12.64%	$184.74
year 15	$3,293.87	23%	$507.63	11.01%	11.66%	$205.99
Continuing Period	$3,656.20	23%	$0.48	11.01%	11.01%	

Relative Valuation

Multiple	EV/Rev (FW)	EV/EBITDA (FW)	P/BV (TTM)	P/E (FW)	Asset Based Valuation	
					Recovery Rate	100%
Median (Peers)	9.1x	29.2x	17.5x	42.9x	Capital	$3,228.13
Base	Revenue (NTM)	EBITDA (NTM)	Book Value (LTM)	Net Income (NTM)	Intangibles	$62.24
MANH	$578.16	$131.49	$653.81	$143.80	Claims	$71.00
Implied EV	$5,268.82	$3,843.50				
Total Net Claims	-$149.83	-$149.83				
Implied EQ	$5,418.65	$3,993.33	$11,416.93	$6,164.03		$3,094.89

Valuation Summary

Model	Intrinsic Value	Target Price	Weight
DCF Valuation	$53.30	$59.39	50.00%
EV/Rev (FW)	$81.56	$90.75	25.00%
EV/EBITDA (FW)	$60.11	$66.88	25.00%
P/BV (TTM)	$171.85	$191.20	0.00%
P/E (FW)	$92.78	$103.23	0.00%
Asset Based Valuation	$46.59	$51.83	0.00%
Price per Share	$62.07	$69.10	100%