### Consumer Discretionary Analyst Report: Daniel Carpenter, Nikiel Kim, Lee Nero

### Michael F. Price Student Investment Fund

November 10, 2020



Date: November 18, 2020 Company Ticker: MHO

Sector: Consumer Discretionary Industry: Household Durables

Forward P/E: 6.52

Sector Forward P/E: 9.70

Market Price: \$44.54

Forecasted Price: \$35.83

**Recommendation: Sell** 

## **Company Summary**

M/I Homes is a single-family homebuilder who also offers mortgage-banking services to home buyers and title services. Their homebuilding operations are designing, marketing, and construction, and sales of single-family homes and attached townhomes. M/I Homes operates across three major business segments: Northern Homebuilding, Southern Homebuilding, and Financial Services. The Financials Services segment provides mortgages, title insurance, and closing services through its subsidiary, M/I financial.

# **Industry Outlook**

Per IBISWorld, revenue for the US homebuilder industry is expected to grow at a yearly rate of 2.6% over the next five years. A short-term burst in activity is likely for homebuilders, as near-zero interest rates will lead to an increase in the construction of homes. However, we believe that a return to moderate interest rate levels in the short-to-mid-term will ease growth in the housing market – resulting in increased inventory levels and a decline in new contracts. Following economic recovery from COVID-19, the industry faces uncertainty in consumer creditworthiness, a continuing increase in the price of raw materials needed for home construction, and an unlikely increase in millennial demand for homeownership. MHO is uniquely exposed to these factors because of its homebuilding operations.

# **Earnings Forecast**

Account Information			Forecast			As Repo	orted Historica	I Data
Report Date	Dec-24	Dec-23	Dec-22	Dec-21	Dec-20	Dec-19	Dec-18	Dec-17
Income Statement								
Revenue	5,212,334	4,521,313	3,921,903	3,401,960	2,950,948	2,500,290	2,286,282	1,961,971
Land & housing expense	4,181,602	3,627,229	3,146,352	2,729,227	2,367,402	2,005,861	1,836,704	1,561,022
Impairment of inventory & investment in unconsolidated joint	5,000	5,000	5,000	5,000	5,000	5,002	5,809	7,681
General & administrative expense	242,320	221,315	201,594	183,213	166,161	147,954	137,779	126,282
Selling expense	321,843	279,175	242,164	210,059	182,210	154,384	142,829	128,327
Acquisition & integration costs	-	-	-	-	-	-	1,700	-
Equity in income of joint venture arrangements	311	311	311	311	311	311	312	539
Interest expense	21,375	20,384	17,382	20,242	21,460	21,375	20,484	18,874
Total costs & expenses	4,772,451	4,153,414	3,612,803	3,148,051	2,742,544	2,334,887	2,145,617	1,842,725
Income (loss) before income taxes	439,883	367,899	309,100	253,909	208,403	165,403	140,665	119,246
Provision (benefit) for income taxes	102,224	85,496	71,832	59,006	48,431	38,438	33,626	48,243
Net income (loss)	337,659	282,403	237,269	194,903	159,972	126,965	107,039	71,003

Our earnings forecast for M/I Homes is based on numerous drivers such as revenue growth year over year, mortgage loans held for sale as a percentage of sales, etc. (see our earnings forecast to review all drivers used). Some of these drivers are basic but some are industry specific. Our earnings forecast uses data from as far back as Q1 2016 and forecasts all the way out to Q3 2021. Almost all line entries are based on the drivers mentioned above, which are based on historical averages and regression analysis.

### Valuation

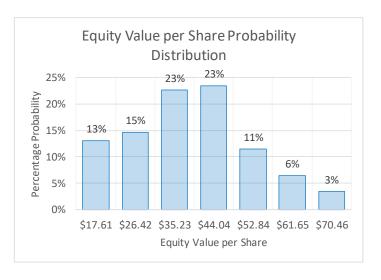
Free Cash Flow to Equity (FCFE)	Dec-24	Dec-23	Dec-22	Dec-21	Dec-20	Dec-19	Dec-18	Dec-17	Dec-16
Net Income	339,898	280,642	234,008	195,185	161,798	126,965	107,039	71,003	55,329
Add back depreciation	(1,000)	-	7,000	(4,000)	5,850	(6,263)	(3,070)	(11)	790
Subtract increase in current assets	(192,198)	(326,342)	(309,608)	(240,585)	(151,131)	(26,675)	(115,972)	(294,373)	(167,152
Add back increase in current liabilities	1,300	8,700	13,600	17,400	18,298	7,211	25,625	28,675	80,593
Subtract increase in fixed assets at cost	(1,000)	7,000	3,000	1,850	(26,513)	(2,056)	(5,660)	(3,738)	(10,751)
Net new Debt	50,736	57,685	55,535	51,978	49,842	(67,774)	31,794	229,161	23,721
Free cash flow	197,736	27,685	3,535	21,828	58,144	31,408	39,756	30,717	(17,470)
Discounted Cash Flows									
Cost of Equity	13.81%								
Long Term Growth in Free Cash Flow	3.50%								
Short Term Growth Rate	15.28%								
Sector Forward P/E Ratio	9.7								
Report Date	Dec-24	Dec-23	Dec-22	Dec-21	Dec-20	Dec-19	Dec-18	Dec-17	Dec-16
Free cash flow	28,147	197,333	(47,113)	94,216	45,649	(83,592)	39,756	30,717	(17,470)
Terminal Value	282,578								
Tommar Value	202,570								
Total	310,725	197,333	(47,113)	94,216	45,649				
Total	310,725		,	94,216	45,649				
Total Enterprise value	310,725 473,479		(47,113)	94,216	45,649				
Total  Enterprise value Add Year 0 cash and marketable securities	310,725 473,479 6,083		,	94,216	45,649				
Total  Enterprise value Add Year 0 cash and marketable securities Asset value in year 0	310,725 473,479 6,083 479,562		,	94,216	45,649				
Total  Enterprise value Add Year 0 cash and marketable securities	310,725 473,479 6,083		,	94,216	45,649				
Total  Enterprise value Add Year 0 cash and marketable securities Asset value in year 0	310,725 473,479 6,083 479,562		,	94,216	45,649				
Total  Enterprise value  Add Year 0 cash and marketable securities  Asset value in year 0  Subtract out value of firm's debt today	310,725 473,479 6,083 479,562		,	94,216	45,649				
Enterprise value  Add Year 0 cash and marketable securities  Asset value in year 0  Subtract out value of firm's debt today  Most Likely Equity Value	310,725 473,479 6,083 479,562 - \$ 1,017,041 28,386		,	94,216	45,649				
Total  Enterprise value Add Year 0 cash and marketable securities Asset value in year 0 Subtract out value of firm's debt today  Most Likely Equity Value Year end shares outstanding	\$10,725 473,479 6,083 479,562 \$1,017,041 28,386 \$35.83		ase trace back	94,216	45,649				
Total  Enterprise value Add Year 0 cash and marketable securities Asset value in year 0 Subtract out value of firm's debt today  Most Likely Equity Value Year end shares outstanding Most Likely Equity Value Per Share	\$10,725 473,479 6,083 479,562 \$1,017,041 28,386 \$35.83	Conditional, ple	ase trace back	94,216	45,649				

A standard long-term growth rate of 3.50% is used, while the short-term growth rate comes from historical trends (averages) year over year. The short-term growth rate we calculated was 15.28%. The cost of equity we calculated was 13.81%. The Cost of equity is dependent on the long-term growth rate and the firm forward P/E ratio. Additionally, the Q3 Earnings Call revealed that management did not plan to aggressively service existing debt. Although the cost of equity may seem relatively high, we believe these factors and forward P/E ratios among comparable firms justifies this decision. The sector forward P/E ratio was pulled from Yardeni Research's November 11<sup>th</sup>, 2020 report.

# **Sensitivity Analysis**

While we have an idea of what the most likely equity value, and subsequently, the equity value per share is, we have also sketched out other equity value, and the probabilities of these values. The equity value per share that we believe is the most likely is \$34.02.

Equity Value			Equity Value per Share	Probability
\$	500,000	\$	17.61	13%
\$	750,000	\$	26.42	15%
\$	1,000,000	\$	35.23	23%
\$	1,250,000	\$	44.04	23%
\$	1,500,000	\$	52.84	11%
\$	1,750,000	\$	61.65	6%
\$	2,000,000	\$	70.46	3%



### Conclusion

Based on the analysis provided above, we recommend selling our position in M/I Homes. Based on our analysis and calculations, we believe that M/I Homes shares are overvalued by around 23%, with a value of \$34.02.

Enterprise value Add Year 0 cash and marketable securities Asset value in year 0 Subtract out value of firm's debt today	1,003,029 6,083 1,009,112	Item will vary within spreadsheet due to probability range
Most Likely Equity Value Year end shares outstanding Most Likely Equity Value Per Share 11/17/2020 Trading	28,386	Overvalued by 19.6%
Current Outstanding Recommendation	SELL	



Date: November 10, 2020 Company Ticker: AAN

Sector: Consumer Discretionary Industry: Household Durables

Forward P/E: 11.19 Sector Forward P/E: 9.70 Market Price: \$60.60

Forecasted Price: \$29.77

**Recommendation: Sell** 

# **Company Summary**

Aaron's is a lease-to-own service provider of furniture, consumer electronics, computers, home appliances, and accessories. They operate in three core business segments: Aaron's business, Progressive Leasing, and Vive. Aaron's business refers to their brick and mortar stores and e-commerce. Progressive Leasing is a virtual lease-to-own company that provides lease-purchase solutions. Vive offers customized programs along with services including revolving loans through private label cards.

### **Industry Outlook**

Aaron's operates primarily in-home furniture rental, consumer electronics, and household appliance rental. The home furniture rental industry is in decline, while the consumer electronics and appliances rental industry is growing. This can be attributed to a favorable shift in buyer preference towards lease-to-own transactions, the gradual reopening of franchise stores nationwide, and technological advancements in the portfolio of products Aaron's carries. One thing to observe for Aaron's and similar companies is the creditworthiness of consumers. If an increasing number of consumers have subprime credit, businesses like Aaron's will likely see increased sales. However, the previous yearly and projected declines in non-retail sales significantly hurt Aaron's growth potential. We believe the market in which Aaron's e-commerce platform operates is saturated, with larger players possessing greater economies of scale, access to distribution networks, and marketing.

### **Earnings Forecast**

The earnings forecast for Aaron's is based on various drivers, such as current assets as a percentage of sales, debt trends, etc. (see our earnings forecast to view and interact with all drivers and assumptions). Again, while some of these drivers are standard, some are firm/industry specific. An example of a firm specific driver for Aaron's depreciation of lease merchandise as a percent of Revenue QoQ (quarter over quarter). Almost all line entries are based on the drivers mentioned above, which are based on historical averages and regression analysis.

Account Information			Forecast			As Repo	orted Historical	Data
Report Date	Dec-24	Dec-23	Dec-22	Dec-21	Dec-20	Dec-19	Dec-18	Dec-17
Income Statement								
Lease revenues & fees	5,546,927	5,114,264	4,715,349	4,347,550	4,008,439	3,698,491	3,506,418	3,000,231
Retail sales	53,721	51,194	48,786	46,491	44,304	38,474	31,271	27,465
Non-retail sales	42,448	54,535	70,063	90,012	115,641	140,950	207,262	270,253
Franchise royalties & fees	(44,769)	(24, 181)	(6,480)	8,751	21,857	33,432	44,815	48,278
Interest & fees on loans receivable	52,637	48,691	45,092	41,826	38,881	35,046	37,318	34,925
Other revenues	1,600	1,600	1,600	1,600	1,600	1,263	1,839	2,556
Total revenues	5,547,290	5,148,721	4,784,226	4,452,577	4,152,959	3,877,564	3,754,287	3,313,858
Depreciation of lease merchandise	2,870,200	2,655,000	2,458,700	2,280,600	2,120,100	1,972,358	1,727,904	1,448,631
Retail cost of sales	34,000	32,400	30,900	29,400	28,000	24,024	19,819	17,578
Non-retail cost of sales	36,400	46,800	60,100	77,200	99,200	113,229	174,180	241,356
Operating expenses	2,219,000	2,053,000	1,901,000	1,763,000	1,639,000	1,524,849	1,618,423	1,403,985
Restructuring expenses, net	24,319	36,872	20,224	2,659	73	39,990	1,105	17,994
Legal & regulatory expense (income)	-	-	-	-	-	179,261	-	-
Impairment of Investment	-	-	-	-	-	-	40,196	-
Other operating expense (income), net	1,094	8,750	1,254	1,805	10,008	11,929	2,116	535
Total costs & expenses	5,185,012	4,832,822	4,472,178	4,154,664	3,896,381	3,865,640	3,583,743	3,130,079
Operating profit (loss)	362,278	315,899	312,048	297,913	256,577	11,924	170,544	183,779
Interest income	1,560	1,560	1,560	1,560	1,560	1,790	454	1,835
Interest expense	21,140	19,570	18,130	16,840	16,220	16,967	16,440	20,538
Impairment of investment	-	-	-	-	-	-	40,196	-
Other non-operating income (expense), net	2,400	2,400	2,400	2,400	2,400	2,091	1,320	3,581
Earnings (loss) before income taxes	345,098	300,289	297,878	285,033	244,317	(1,162)	115,682	168,657
Income tax expense (benefit)	147,143	128,037	127,009	121,532	104,172	61,316	55,994	52,959
Net earnings (loss)	197,956	172,252	170,869	163,501	140,146	(62,478)	171,676	115,698

### **Valuation**

A standard long term FCFE growth rate of 3.50% is used, while the short-term growth rate comes from historical trends (averages) year over year. The short-term growth rate we calculated was 8.46%. The Cost of equity is dependent on the long-term growth rate and the firm forward P/E ratio. The cost of equity we calculated was 12.81%. The sector forward P/E ratio was pulled from Yardini Research on November 11<sup>th</sup>, 2020.

Free Cash Flow to Equity (FCFE)	Dec-24	Dec-23	Dec-22	Dec-21	Dec-20	Dec-19	Dec-18	Dec-17	Dec-16
Net Income	206,503	177,935	170,963	162,778	130,079 -	(62,478)	171,676	115,698	85,357
Add back depreciation	181,781	162,902	145,984	130,823	117,236	4 105,061	94,150	82,572	82,378
Subtract increase in current assets	(177,829)	(162,149)	(147,165)	(132,675)	(81,373)	(162,524)	(98,504)	99,486	(133,702)
Add back increase in current liabilities	29,766	27,141	24,633	22,208	20,435	(20,337)	(11,657)	7,044	(2,590)
Subtract increase in fixed assets at cost	(38,427)	(38,322)	(38,322)	(38,322)	(35,828)	(35, 139)	(63,469)	(7,977)	6,255
Net new Debt	-	-	(2,522)	(37,548)	(72,573)	(84,531)	55,917	(135,035)	(109,679)
Free cash flow	201,793	167,508	153,570	107,264	77,976	(259,948)	148,113	161,788	(71,981)

# Discounted Cash Flows Cost of Equity Long Term Growth in Free Cash Flow Short Term Growth Rate Sector Forward P/E Ratio Report Date Free cash flow

Terminal Value Total

13.81%
3.50%
8.46%
9.7

Dec-24	Dec-23	Dec-22	Dec-21	Dec-20
186,211	158,557	150,011	77,845	74,703
1,869,465				
2,055,675	158,557	150,011	77,845	74,703

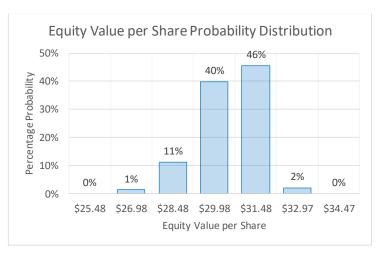
Dec-19	Dec-18	Dec-17	Dec-16
(259,948)	148,113	161,788	(71,981)

Enterprise value	2,115,948	Item will vary within spreadsheet due to probability range
Add Year 0 cash and marketable securities	57,755	
Asset value in year 0	2,173,703	
Subtract out value of firm's debt today	(285,801)	
Most Likely Equity Value	1,985,920	
Year end shares outstanding	66,718	
Most Likely Equity Value Per Share	\$ 29.77	
11/17/2020 Trading	\$ 60.60	Overvalued by 50.9%
Current Outstanding Recommendation	SELL	

# **Sensitivity Analysis**

While we have an idea of what the most likely equity value, and subsequently, the equity value per share is, we have also sketched out other equity values, and the probabilities of these values. The equity value per share that we believe to be most likely is \$29.77.

Εq	ιμity Value	uity Value er Share	Probability
\$	1,700,000	\$ 25.48	0%
\$	1,800,000	\$ 26.98	1%
\$	1,900,000	\$ 28.48	11%
\$	2,000,000	\$ 29.98	40%
\$	2,100,000	\$ 31.48	46%
\$	2,200,000	\$ 32.97	2%
\$	2,300,000	\$ 34.47	0%



### Conclusion

Based on the above analysis and calculations, we are recommending that the fund sell its positions in Aaron's. We believe that the shares are currently overvalued by around 50%, with an equity value per share of \$29.77, compared to the price of \$60.60.

Enterprise value 2,115,948 Item will vary within spreadsheet due to probability range

Add Year 0 cash and marketable securities 57,755

Asset value in year 0 2,173,703

Subtract out value of firm's debt today (285,801)

Most Likely Equity Value

Year end shares outstanding

Most Likely Equity Value Per Share

1,985,920
66,718
29.77

11/17/2020 Trading \$ 60.60 Overvalued by 50.9%

**Current Outstanding Recommendation** 

SELL



Date: November 18, 2020 Company Ticker: GPI

Sector: Consumer Discretionary Industry: Automotive Retail

Market Price: \$121.40 Forecasted Price: \$141.35

Forward P/E: 6.56

Sector Forward P/E: 9.70

**Recommendation: Buy** 

# **Company Summary**

Group 1 Automotive is an automotive retailer that offers new and used cars and light trucks, arranges related vehicle financing, and service and insurance contracts. It also provides automotive maintenance and repair services and sells vehicle parts. They operate out of three main geographical segments: Brazil, the United Kingdom, and the United States. Group 1 owns and operates 238 franchises offering 30 brands of automobiles at 186 dealership locations and 49 collision centers worldwide.

# **Industry Outlook**

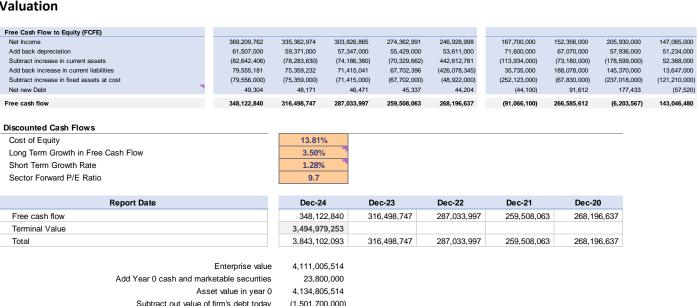
Group 1 operates in the industry known as "New Car Dealers in the US", as they sell new and used vehicles. Industry revenue will likely increase over time, due to an increase in consumer confidence and the current low interest rate levels due to the coronavirus pandemic. IBISWorld predicts that revenues in the industry will rise at an annualized rate of 5.1% to \$1.0 trillion over the five years. These predictions obviously hinge on how the economy and the greater World recovers from the recent coronavirus pandemic. Higher (or lower) consumer confidence levels will lead to higher (or lower) revenues for the industry. The same statement can be said for disposable income.

# **Earnings Forecast**

Account Information			Forecast			As	Reported Historical	Data
Report Date	Dec-24	Dec-23	Dec-22	Dec-21	Dec-20	Dec-19	Dec-18	Dec-17
Income Statement								
New vehicle retail sales	5,331,600,000	5,264,200,000	5,197,600,000	5,131,900,000	5,066,966,996	6,314,100,000	6,181,371,000	6,157,531,000
Used vehicle retail sales	3,674,400,000	3,454,600,000	3,248,000,000	3,053,700,000	2,871,072,890	3,366,600,000	3,166,070,000	2,798,986,000
Used vehicle wholesale sales	230,700,000	237,100,000	243,700,000	250,500,000	257,433,975	355,200,000	369,575,000	400,170,000
Parts & service sales	1,679,800,000	1,581,400,000	1,488,800,000	1,401,600,000	1,319,522,470	1,510,000,000	1,416,889,000	1,338,032,000
Finance, insurance & other revenues, net	638,100,000	607,200,000	577,800,000	549,800,000	523,200,000	497,900,000	467,453,000	429,002,000
Total revenues	11,554,600,000	11,144,500,000	10,755,900,000	10,387,500,000	10,038,196,330	12,043,800,000	11,601,358,000	11,123,721,000
Cost of New vehicle retail sales	5,077,605,721	5,013,416,617	4,949,989,401	4,887,419,311	4,825,579,677	6,013,300,000	5,870,502,000	5,835,526,000
Cost of Used vehicle retail sales	3,454,695,634	3,248,038,193	3,053,791,481	2,871,109,312	2,699,402,073	3,165,300,000	2,980,142,000	2,621,431,000
Cost of Used vehicle wholesale sales	229,985,557	236,365,738	242,945,298	249,724,240	256,636,741	354,100,000	367,880,000	402,912,000
Cost of Parts & service sales	773,152,980	727,862,914	685,242,384	645,107,285	607,329,878	695,000,000	657,741,000	618,343,000
Total cost of sales	9,535,439,892	9,225,683,461	8,931,968,565	8,653,360,147	8,388,948,369	10,227,700,000	9,876,265,000	9,478,212,000
Gross profit (loss)	2,019,160,108	1,918,816,539	1,823,931,435	1,734,139,853	1,649,247,961	1,816,100,000	1,725,093,000	1,645,509,000
Selling, general & administrative expenses	1,251,304,000	1,207,839,000	1,166,665,000	1,127,647,000	1,090,657,000	1,358,400,000	1,273,057,000	1,226,195,000
Depreciation & amortization expense	61,507,000	59,371,000	57,347,000	55,429,000	53,611,000	71,600,000	67,070,000	57,936,000
Asset impairments	29,544,000	28,517,000	27,545,000	26,624,000	25,751,000	22,200,000	43,883,000	19,506,000
Income (loss) from operations	676,805,108	623,089,539	572,374,435	524,439,853	479,228,961	363,900,000	341,083,000	341,872,000
Floorplan interest expense	92,100,000	86,400,000	80,600,000	74,800,000	69,100,000	61,600,000	59,882,000	52,372,000
Other interest expense, net	89,300,000	86,700,000	84,100,000	81,500,000	78,800,000	74,900,000		70,497,000
Income (loss) before income taxes	495,405,108	449,989,539	407,674,435	368,139,853	331,328,961	227,400,000	205,403,000	219,003,000
Provision (benefit) for income taxes	116,117,380	105,472,482	95,554,298	86,287,837	77,659,778	53,300,000	47,631,000	5,561,000
Net income (loss)	379,287,728	344,517,057	312,120,137	281,852,016	253,669,183	174,100,000	157,772,000	213,442,000
Less: earnings allocated to participating securities	10,077,966	9,154,083	8,293,272	7,489,025	6,740,185	6,400,000	5,416,000	7,512,000
Net income available to common shareholders	369,209,762	335,362,974	303,826,865	274,362,991	246,928,998	167,700,000	152,356,000	205,930,000

Our earnings forecast for Group 1 Automotive, Inc. is based on numerous drivers such as itemized revenue growth year over year, and other costs as a percentage of their relative dependencies, etc. (see our earnings forecast to review all drivers used). Some of these drivers are based on empirical data, but some are industry-specific. Our earnings forecast uses data from as far back as Q1 2016 and forecasts all the way out to Q3 2021. Almost all line entries are based on the drivers mentioned above, which are based on historical averages or regression analysis.

### **Valuation**



Subtract out value of firm's debt today (1,501,700,000) Equity value \$ 2,633,105,514 Year end shares outstanding 18.628.208 Equity value per share 141.35 121.40 11/17/2020 Trading

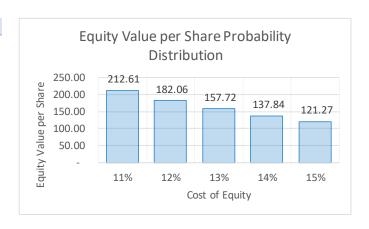
**Current Outstanding Recommendation** 

A standard long-term growth rate of 3.50% is used, while the short-term growth rate comes from historical trends (averages) year over year. The short-term growth rate we calculated was 1.28%. The cost of equity we calculated was 13.81%. The Cost of equity is dependent on the long-term growth rate and the sector forward P/E ratio. Additionally, the Q3 Earnings Call revealed that management did not plan to aggressively service existing debt. Although the cost of equity may seem relatively high, we believe these factors and forward P/E ratios among comparable firms justifies this decision. The sector forward P/E ratio was pulled from Yardeni Research's November 11<sup>th</sup>, 2020 report.

# **Sensitivity Analysis**

While we have an idea of what the most likely equity value, and subsequently, the equity value per share is, we have also modeled other equity values and the probabilities of these values. The model predicts that the most probabilistic equity value per share is \$141.35.

Cost of Equity	<b>Equity Value</b>	<b>Equity per Share</b>
11%	3,960,599,785	212.61
12%	3,391,382,857	182.06
13%	2,938,072,395	157.72
14%	2,567,773,436	137.84
15%	2,259,018,872	121.27



# Conclusion

Based on the analysis provided above, we recommend buying equity in Group 1 Automotive, Inc. Based on our modeling, it appears that Group 1 Automotive, Inc. is undervalued by 16.4%, with a target price of \$141.35.

Enterprise value	4,111,005,514	
Add Year 0 cash and marketable securities	23,800,000	
Asset value in year 0	4,134,805,514	
Subtract out value of firm's debt today	(1,501,700,000)	
Equity value	\$ 2,633,105,514	
Year end shares outstanding	18,628,208	
Equity value per share	\$ 141.35	
11/17/2020 Trading	\$ 121.40	Undervalued by 16.4%
Current Outstanding Recommendation	BUY	