Valuation and Analysis of CNHI

Presentation for the Ben Graham Centre's Virtual Stock Picking Competition

April 19, 2022

Recommendation to Buy
Intrinsic Value $23
Entry Point* $15.83
Upside 45%
Margin of Safety 30%
MOIC 1.45x

*Closing price 13/4/22

TEAM 3

Executive Summary

- On January 3, 2022, CNHI completed the Spin-off of the Commercial Services Vehicle, Power-Train, and parts the auxiliary Financial Services segments under the IVECO name. The new CNHI will focus on the Agriculture and Construction vehicle segments along with the auxiliary Financial Service segments.

- Our analysis of the company's competitive advantages shows that the company's position in these segments is protected by wide moats, mainly due to past operational sunk costs, product reputation, control over distribution networks as well as the industries' partnership structure.

- Our quantitative assessment of these moats validates our qualitative analysis (Market Share Test and Sustainable ROCE* Test).

- We believe that the new strategies implemented by Scott Wine (appointed CEO Jan. 4, 2021) and his management team are well positioned to capture the value of the company's sustainable competitive advantages. i.e. investment in the company's digital capabilities, focus on culture, operational efficiency, and ESG initiatives.

- Our due diligence check on the Scott Wine and his track record at Polaris, where he served as CEO from 2007 to 2021, has provided us with assurance in the CEO's success in creating growth in a low growth environment as well as his success in strategic M&A.

- We take management's recent increase in their equity positions of CNHI shares as a signal of confidence in the company's outlook.

- CNHI's sustainable ROCE and growth of R&D is aligned with revenue, which supports our Growth in the Franchise assumption.

*ROCE is Joel Greenblatt's Return On Capital Employed = (EBITDA – MCX +/-Δ Working Capital)/ (PPE + Working Capital)

Financial Summary – Assumptions Used

- To evaluate the entry prices from the perspective of an equity investor, Team 3 utilized four methods of valuation*:

    1. Asset Value Method: is based on the value of replication of assets. This method was not able to provide an entry point and therefore was not retained.

    2. Earnings Power Value Method: is based on Unlevered Free Cash Flow that we discounted at a Weighted Average Cost of Capital of 6.5%. This method was not able to provide an entry point and therefore was not retained.

    3. Growth within the Franchise Method: is based on a growth rate of 4.5% with a discount of 2-3% for reliability. The Weighted Average Cost of Capital used was 6.5%.

    4. Discounted Cash Flow Method: this method was used as a safety check. The same assumptions used for the Growth within the Franchise Method were used for this method.

- Margin of Safety:

    - A margin of safety of 30% was used in all models. The margin was derived by assessing CNHI's risks in operations, finance, as well as, the risks in our model and estimates.

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* Asset Value, Earnings Power Value, and Growth within the Franchise Methods are based on Bruce Greenwald's *Value Inventing: From Graham to Buffett and Beyond* (2001).

Company Overview

CNHI is a capital goods company that is engaged in the design, production, marketing, sale, and financing of agriculture and construction equipment. The company was born after a split from Fiat in 2010. The company's operations are in North America, South America, Europe and the Rest of the World. The Agriculture segment accounts for over 80% of revenues and over 90% of operating income.

Industry Growth Drivers

- Agriculture Cycles
- Trends in Precision Agriculture
- Feed the World
- Construction Cycles
- Trends in Operating Margins

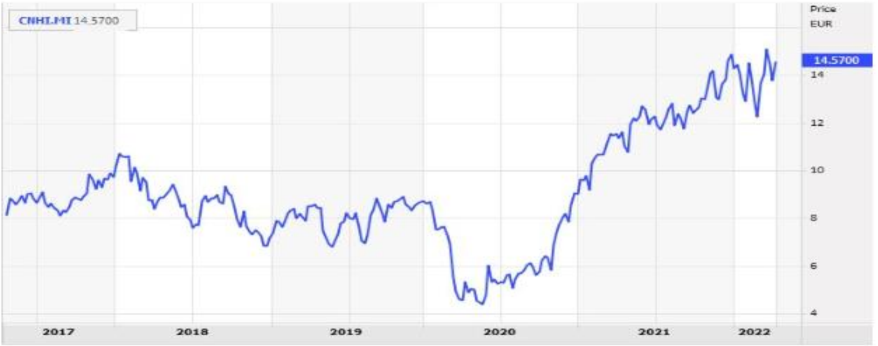
Key Moats

- Control over Distribution
- Control over Share of Mind
- High R&D to Sustain Operations
- Industry Partnership Structure
- Economies of Scale

GENERAL INFORMATION

ISIN Code	NL0010545661
Exchange Code	MIL
TRBC Industry	Heavy Machinery & Vehicles
No. of Employees	71,895
Company Market Cap (EUR)	19.88B

5 YEARS



SHARE DETAIL

Close Price	14.23
52 Wk high	17.39
52 Wk low	11.48
5 day Average Volume	3,054,027
Currency	EUR
Shares Outstanding	1B

RATIOS

Dividend	0.28
Dividend Yield	1.97
P/E (TTM)	12.77733

Part 1: High Quality Business – Qualitative Analysis of Barriers to Entry

Barriers for entrants to Sell products

Share of Mind

- Brand loyalty is high

Replacement Parts

- Access to replacement parts is important after sale of product and a distribution channel is required

Control Over Distribution

- Network of Dealers to sell products as well as a strong relationship with importers

Financing Options

- Low-rate programs

Barriers for entrants to Produce products at low cost

High Cost Research and Development

- Heavy R&D costs to keep up with trends and innovate

Economies of Scale

- Size matters

Human Capital and Knowledge

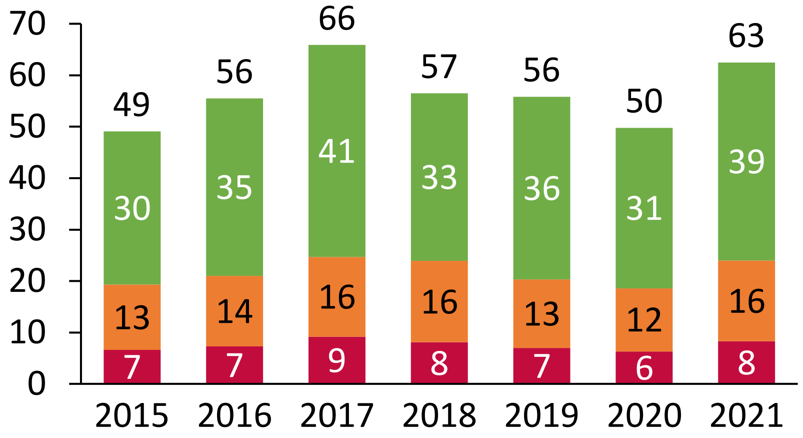
- Need for organized skilled human capital

Industry Relationships

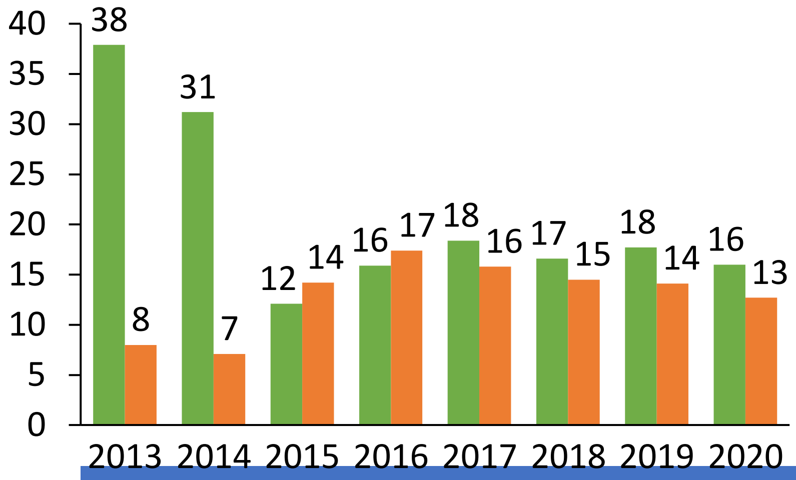
- Partnerships between large players is common in these industries

Part 2: High Quality Business – Quantitative Test for Barriers to Entry

Tractor and AG in US*

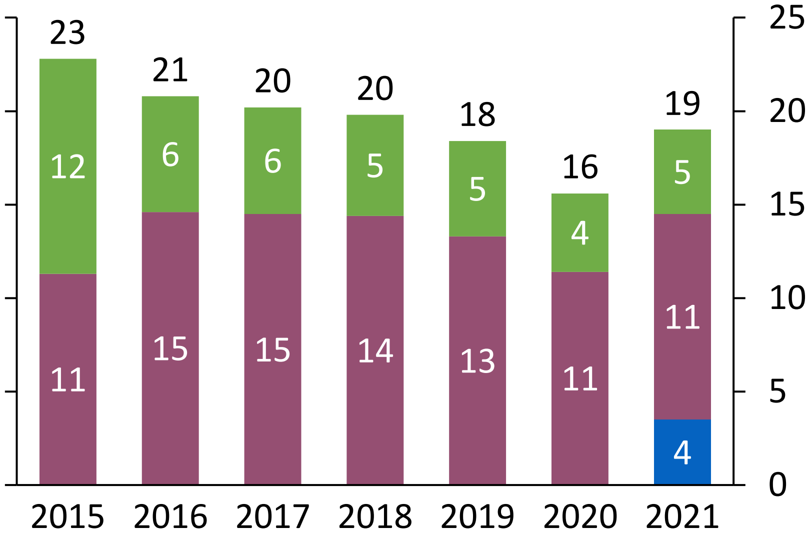


Combine Harvesters' Manufacturing in US*

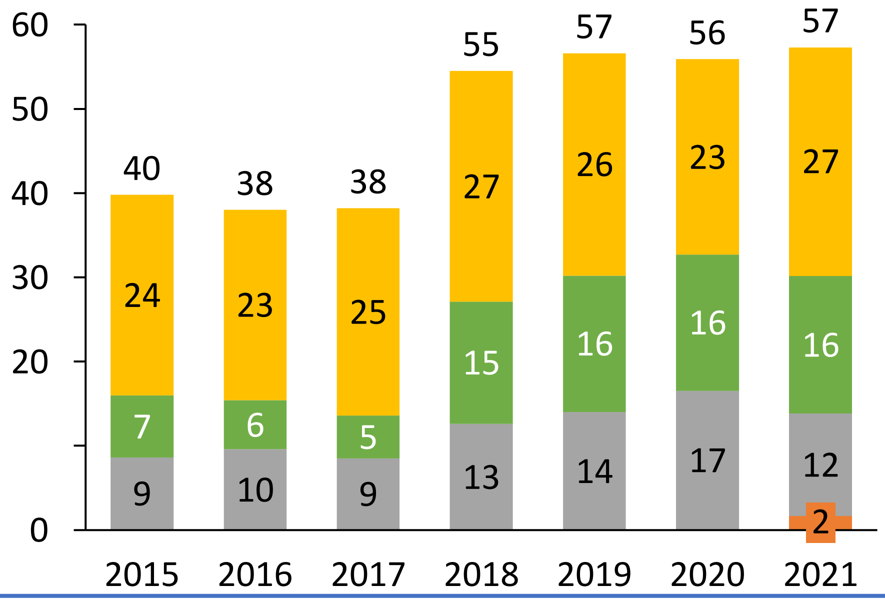


- Caterpillar Inc.
- Deere & Company
- Komatsu Ltd.
- CNH Industrial
- AGCO Corporation
- Trimble Inc.
- Raven

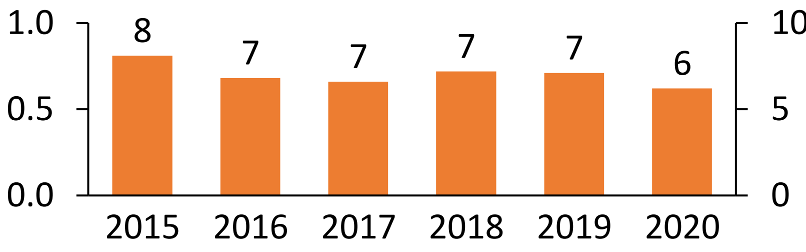
Precision AG in US*



Construction and Machinery in US*



Tractor and AG in CAN*



Team 3

*Source: IBIS World Reports

Part 3: Management is organized around Competitive Advantages

- Spinning off will unlock value to shareholders due to conglomerate discount.
- Leaner company with less bureaucracy

I V E C O • G R O U P

IVECO CAPITAL | IVECO BUS | IVECO | FPT | IVECO DEFENCE VEHICLES | ASTRA | MAGIRUS

- Scott Wine, former CEO of Polaris (company with similar moats):
  - Was able to grow through overseas expansion.
  - Strategic acquisition of Indian motorcycle.
  - Military background implies focus on morale and employee motivation.

Scuttlebutt: His Glassdoor CEO Approval Rating is 73%.

John Deere is the largest competitor in the AG space for CNHI.

In 2015, Deere was the leader in the Precision Agriculture industry.

CNHI's acquisition of Raven will lead to a better ability to compete with Deere. Giving them the potential to take Market Share and grow the franchise.

Synergies from acquiring Raven will grow the CNHI franchise.

CASE CONSTRUCTION | NEW HOLLAND AGRICULTURE | RAVEN

ESG

- Decreasing emissions regulation risks
- Better Milage for Vehicles
- Long-term Market Approval

Part 4: Increase in Insider Buying of Shares

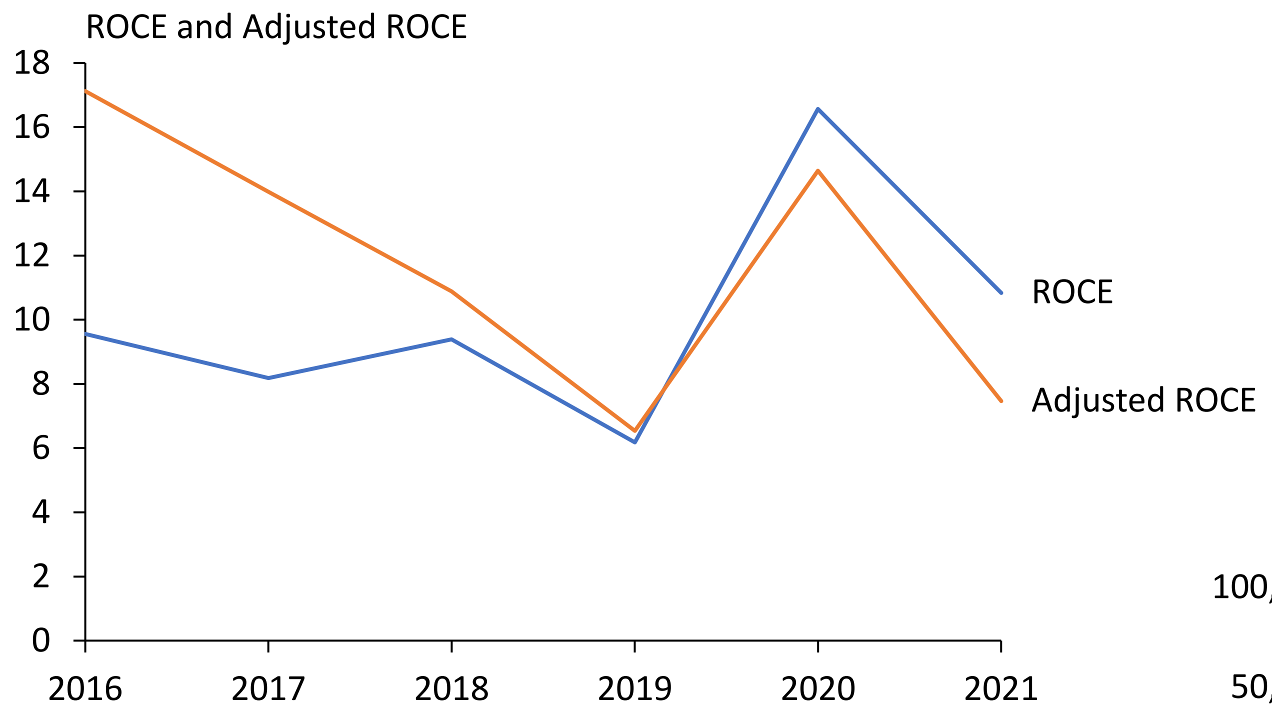
Institutional Ownership

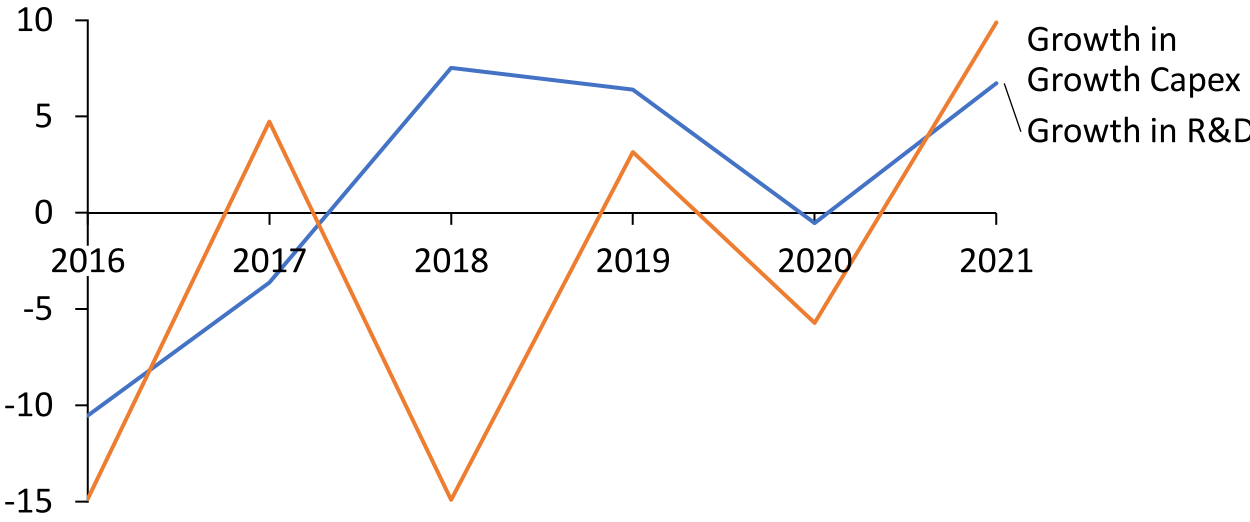
	NAME	Position	+/-	Date	Filling	% of shares
1	EXOR NV	366927900	0	1/31/2021	MF-AGG	27.06
2	Harris Associates LP	97,910,801	0	12/31/2021	13G	7.22
3	Credit Agricole Group	55,445,224	6,955,579	4/8/2022	ULT-AGG	4.09
4	Artisan Partners Ltd	53,676,155	53,676,155	1/26/2022	EXCH	3.96
5	BlackRock Inc	50,470,518	-2,093,082	6/9/2021	EXCH	3.72
6	Vanguard Group Inc/The	32,900,442	637,414	12/31/2021	ULT-AGG	2.43
7	Hotchkis and Wiley Capital Managem	29,346,835	-1,958,340	12/31/2021	13F	2.16
8	Schroders PLC	28,200,059	10,682,926	12/31/2021	ULT-AGG	2.08
9	Norges Bank	21,732,429	10,209,510	12/31/2021	13F	1.6
10	Bank of Italy	19,374,388	0	12/31/2021	13F	1.43

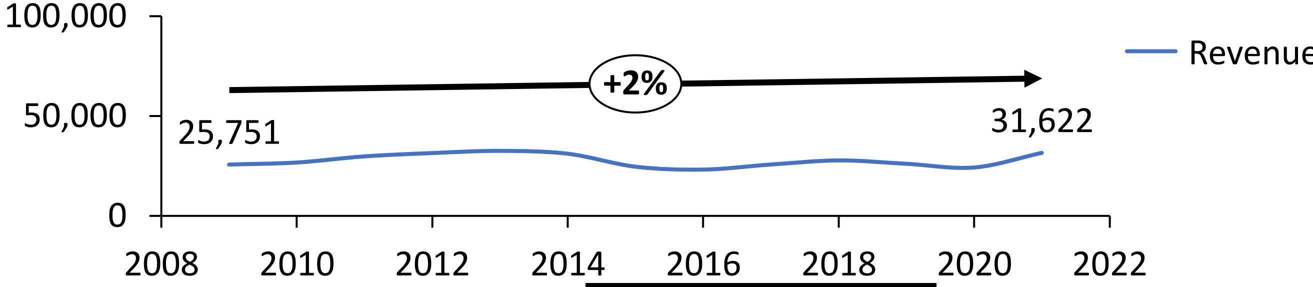
Insider Ownership

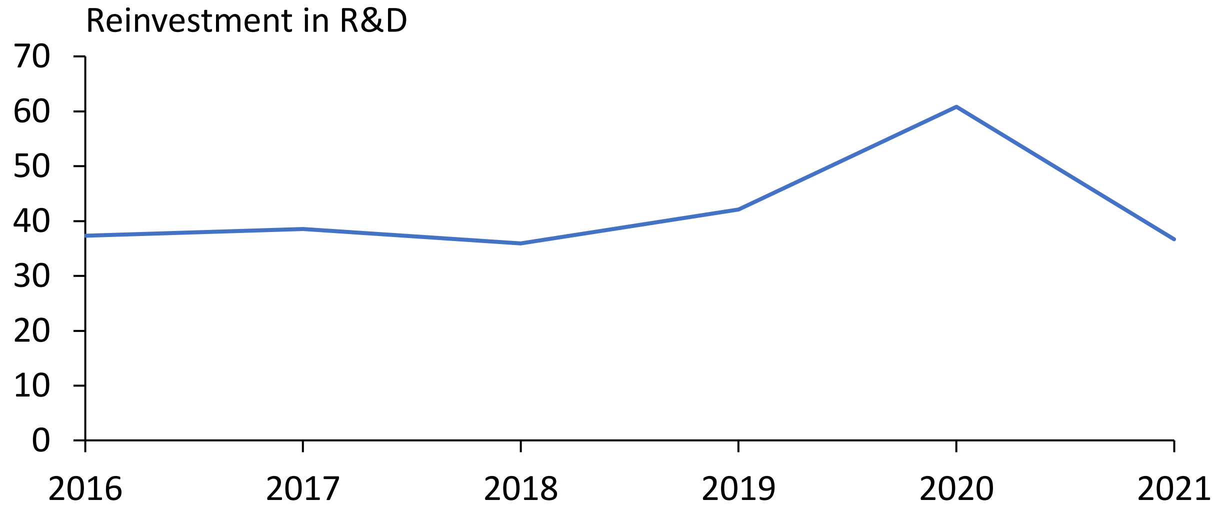
	NAME	Position	+/-	Date	Filling	% of shares
1	Neilson Derek James (Head of Agriculture)	414,555	169,298	2/25/2021	20F	0.03
2	Wine Scott W (CEO CNH)	350,000	150,000	2/24/2022	EXCH	0.03
3	Nasi Alessandro	348,994	0	2/25/2021	20F	0.03
4	Fistarol Vilmar	188,585	147,328	2/25/2021	20F	0.01
5	Weishaar Andreas Georg	182,075	126,762	2/25/2021	20F	0.01
6	Marx Gerrit A	177,302	177,302	2/25/2021	20F	0.01
7	Pampalone Stefano (Head of Construction)	151,257	106,241	2/25/2021	20F	0.01
8	Rocchetta Oddone Incisa Della (CFO)	136,207	94,950	2/25/2021	20F	0.01
9	Heywood Suzanne	129,389	0	2/3/2022	EXCH	0.01
10	Billiet Luc	120,027	62,497	2/25/2021	20F	0.01

Part 5: Growth in the company's ROCE in tandem with R&D justifies Growth within the Franchise Assumption (2nd Quantitative Moat Test)









	LOW	HIGH	AVERAGE	
ROCE	6.2%	16.6%	10.1%	
Adjusted ROCE	6.5%	17.1%	11.8%	ROCE * 3year avg(GCAPEX/ (CFI-GCapex))
Growth in R&D	(10.5)%	7.5%	1.0%	
Growth in Growth Capex	(14.9)%	9.9%	(3.0)%	
Growth in ROCE	(34.6)%	168.1%	18.8%	
Reinvestement Rate (RR)	35.9%	60.8%	41.9%	R&D/(EBITDA-MCX+/-DWC)
Growth Rate	2.22%	10.08%	4.24%	RR x ROCE

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Income Statement Normalization

CNHI
Income Statement

(All figures in millions, except per share data)

	Actual		Estimated	
Fiscal	**2020**	**2021**	**2022**	**Projection Notes**
Revenue				
AG	$ 10,916	$ 14,754	$ 16,229	10% increase
Construction	2,170	3,081	3,173	3% increase
Financial Services	1,807	1,664	1,714	3% increase
Other	(23)	(25)	-	
Total Revenue	**$ 14,870**	**$ 19,474**	**$ 20,448**	Sum
Cost of Sales	(12,287)	(15,231)	(15,840)	80% of Net AG Sales +90% of Construction
Gross Profit	**$ 2,583**	**$ 4,243**	**$ 4,608**	Sum
Operating, SG&A Expenses	(1,197)	(1,425)	(1,534)	7.5% Normalization guidance
R&D	(634)	(677)	(880)	Increase of 30% guidance
Operating Income	**$ 1,386**	**$ 2,818**	**$ 3,075**	Sum
Results From Investments	68	92	-	unpredictable
Restructuring Costs	(19)	(36)	(100)	Assumption
Other Income	(82)	(124)	(200)	Assumption
Financial Income	(159)	(151)	(317)	Unfavorable increase in interest
EBITDA	**$ 1,194**	**$ 2,599**	**$ 2,458**	
Less: Cash Taxes @ 19%			$ (467)	
Plus: 10% of SGA			153	
Less: Capital expenditures			(393)	
Plus / (Less): Change in net working capital			611	
Unlevered Free cash including Growth in franchise			**$ 2,164**	

Valuation – Earnings Power & Growth in Franchise

Earnings Power Method	
Cost of Capital	6.5%
Implied Enterprise Value	$ 33,292
Equity Value (a)	$ 14,610
Implied Price per Share (b)	$ 11

GROWTH IN FRANCHISE METHOD	Growth Rate	Less: Margin of Reliability	Perpetual Growth rate	Discounted	Implied Multiple
EV w/ Growth					
EBITDA Multiple	4.5%	3.0%	1.5%	$ 43,280	20.0x
	4.5%	2.0%	2.5%	$ 54,100	25.0x
Implied Enterprise Value				**$ 43,280**	**$ 54,100**
Equity Value (a)				$ 24,598	$ 35,418
Implied Price per Share (b)				**$ 18.14**	**$ 26.12**
Implied Price per Share w/ Margin of Safety (b)				**$ 12.70**	**$ 18.28**

TAX		Weight	Cost	after t	
19%	Debt	45%	2.5%	2.025%	0.23%
0%	Equiy	55%	11%	11.000%	6.05%
				WACC	6.28%

Note: Fiscal year ends December 31 of the current year.
Note: Present Values as of December 31, 2021.
(a) Assumes $18,682M of net debt.
(b) Assumes 1,356.1MM shares outstanding.

Team 3

DCF Valuation – Safety Check

Fiscal	2022	Estimated 2023	2024	2025	Projected 2026	2027
REVENUE	$ 20,448	$ 22,126	$ 22,671	$ 23,231	$ 23,804	$ 24,391
EBITDA	2,458	2,925	3,269	3,350	3,433	3,517
EBIT	2,162	2,494	2,714	2,781	2,850	2,920
Less: Cash Taxes @ 19.0%	(411)	(474)	(516)	(528)	(541)	(555)
Tax-effected EBIT	$ 1,751	$ 2,020	$ 2,199	$ 2,253	$ 2,308	$ 2,365
Plus: Depreciation & Amortization	296	431	555	569	583	597
Less: Capital expenditures	(281)	(410)	(527)	(540)	(554)	(567)
Plus / (Less): Change in net working capital	630	633	615	615	615	615
Unlevered free cash flow	**$ 2,396**	**$ 2,675**	**$ 2,841**	**$ 2,896**	**$ 2,952**	**$ 3,010**

WACC @ 6.5%

NPV of Unlevered free cash flow @ 6.5% $ 13,429

EBITDA MULTIPLE METHOD

Terminal Value		Undiscounted	Discounted	Implied Perpetual Growth Rate	
EBITDA Multiple	15.0x	$ 52,760	$ 36,158	1.9%	
	16.0x	56,277	$ 38,569	2.2%	
DCF Range (Implied Enterprise Value)				**$ 49,587** –	**$ 51,997**
Equity Value [a]				$ 30,905 –	$ 33,315
Implied Price per Share [b]				**$ 22.79** –	**$ 24.57**
Implied Price per Share w/Margin of Safety[b]				**$ 15.95**	**$ 17.20**

PERPETUITY GROWTH METHOD

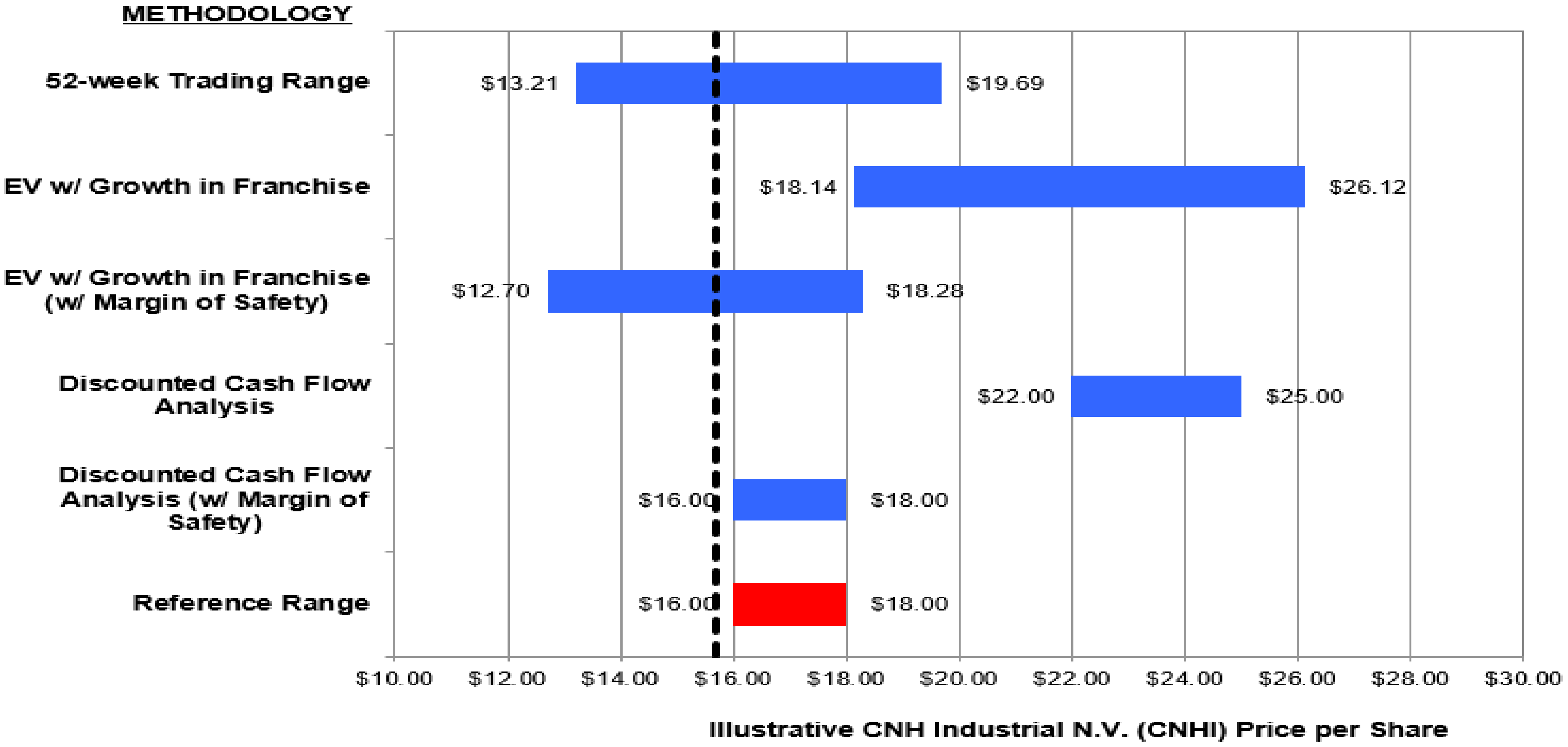
Terminal Value		Undiscounted	Discounted	Implied EBITDA Multiple	
Perpetuity Growth Rate	1.5%	$ 50,380	$ 34,527	14.3x	
	2.5%	$ 62,975	$ 43,159	21.6x	
DCF Range (Implied Enterprise Value)				**$ 47,956** –	**$ 56,588**
Equity Value [a]				$ 29,274 –	$ 37,906
Implied Price per Share [b]				**$ 21.59** –	**$ 27.95**
Implied Price per Share w/Margin of Safety[b]				**$ 15.11**	**$ 19.57**

Note: Fiscal year ends December 31 of the current year.
Note: Present Values as of December 31, 2021.
(a) Assumes $18,682M of net debt.
(b) Assumes 1,356.1MM shares outstanding.

Income Statement Assumptions

	2022	2023	2024	2025	2026	2027	
REVENUE Growth	*5.0%*	*5.5%*	*2.5%*	*2.5%*	*2.5%*	*2.5%*	% Growth
EBITDA Margin	*12.0%*	*13.2%*	*14.4%*	*14.4%*	*14.4%*	*14.4%*	EBITDA / Revenue
EBIT Margin	*10.6%*	*11.3%*	*12.0%*	*12.0%*	*12.0%*	*12.0%*	EBIT / Revenue

Valuation Ranges for CNHI



Deriving Margin of Safety - Risks and Mitigants

	Risk	Mitigant	Adjustment	Rational
Operational Risks	Global Economic Growth	Geographic diversification of operations	0%	
	Industry Cycles	Geographic diversification of operations	0%	
	Regulations	Geographic diversification of operations	0%	
	Intellectual Property Rights	Geographic diversification of operations	0%	
	Right to Repair Act	Push back from Tech lobby	0%	
	Turnaround	Is not valued in market price	0%	
Financial Risks	DB Pension	Overfunded but is still a LT liability	2-5%	Conservative Guestimate
	Credit Risk of Financial Receivables and LT Debt	Provisions and recent rating upgrade	2-5%	
	Dual Listing	American listing (catalyst)	5-10%	Illiquidity premium
	Voting Shares	Long term holdings	0%	
	Controlling Shareholder	Due diligence on shareholder	0%	See Appendix
	Volatility of Spin-Off	Outperform on average	0%	
Model and Estimates	Core Reoccurring Profitability	Cyclical in short-term, less in long-term	0%	
	Sustainability	ESG	0%	
	Estimates	None	10-20%	Default Range
	Special Situation	Will improve with time (catalyst)	10-20%	Messy accounting with many eliminations, 80% of EBIT historically from AG & construction
		TOTAL	30%	

Catalysts

Short-term Catalysts (1-2 years)

- Initial volatility phase of Spin-off dissipates, and market eliminates conglomerate discount. Deere’s multiple is substantially higher then CNHI. While this might be warranted, CNHI would still receive a price upgrade.
- As time passes the eliminations and messy accounting caused by the demerger will dissipate. This will lead to better predictability of the company's cash flow, which would in turn, lead to more accurate analyst coverage.
- American Relisting: This could lead to inclusion in indexes like the S&P and should lead to an initiation of coverage by US analysts who cover competitors like Deere and AGCO that are trading at a higher multiple.
- The agriculture business cycle or construction cycle could be an accelerating catalyst.
- Exclusive licensing agreement with Monarch Tractor for technology specializing in fully electric and autonomous tractors likely to create scalable low-horsepower tractors in the near to medium term

Long-term Catalysts (2-5 years)

- As management’s current organizational changes take effect, CNHI will start to consistently beat analyst estimates.
- Raven integration will lead to growth as the company combines its great industrial capabilities with Raven’s technology. Precisions agriculture is a trend that answers many demands in the market and is still under appreciated.
- The agriculture business cycle or construction cycle could be an accelerating catalyst.
- ESG trends have been very dominate in the past and have led to very high multiple expansion.

Reiterative Summary

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Catalysts
- Initial phase of spin-off sets
- Integration of Raven appreciated by market
- American relisting and Industry Analyst coverage

Major Unmitigable Risks

- Liabilities
- Illiquidity of Shares
- Accounting Eliminations

*ROCE is Joel Greenblatt's Return On Capital Employed = (EBITDA – MCX +/-Δ Working Capital)/ (PPE + Working Capital)
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CNHI

Balance Sheet

($ in millions)

		Cash	Hedging	Pension	TAX	Spin OFF	Ops	Investments	DEBT	Balance	Notes
Current Assets											
Cash & Equivalents	$ 5,845	$ 5,044		801							Contains 801 of restricted Cash for Defined B
Derivatives Assets	184		184								
Receivables from Financing A	15,443						15,443				
Current Tax Receivables	63				63						
Trade Receivables	192						192				
Other Current Receivalbes an	747	98			649						Money market of $98 and $649 of Tax benefit
Inventories	4,228						4,228				
Prepaid Expenses and Other	118						118				
Total Current Assets	$ 26,820										
Non-Current Assets											
Net PPE	$ 1,697						$ 1,697				
Intangible Assets	5,159						5,159				
Invesment and Other Non Cur	355							355			
Net Leases	1,738						1,738				
Defined Benefit Plan Assets	19			19							
Deferred Tax Assets	367				367						
Total Non-Current Assets	$ 9,335										
Assets held for sale	$ 490					$ 490					
Assets held for distribution	14,477					14,477					
	$ 51,122	$ 5,142	$ 184	$ 820	$ 1,079	$ 14,967	$ 28,575	$ 355	$ -	$ 51,122	
Current Liabilities											
Derivative Liablities	$ 182		$ (182)								
Trade Payable	3,531						(3,531)				
Tax Liabilities	325				(325)						
Deferred tax Liabilities	212				(212)						
Current Liabilites	1,721				(487)		(1,234)				487 tax liability and 1234 of other liabilities
Liabilities held for Sale	125					(125)					
Liabilities held for Distribution	11,859					(11,859)					
Total Current Liabilities	$ 17,955										
Debt											
Asset-backed financing	8,875								(8,875)		
Other debt	12,814								(12,814)		
Provisions											
Employee Benefits	939			(939)							
Other Provisions	2,113						(2,113)				
	$ 42,696										
Non-controlling interests	33								(33)		
	$ 8,393	$ -	$ (182)	$ (939)	$ (1,024)	$ (11,984)	$ (6,878)	$ -	$ (21,722)	$ (42,729)	
										$ 8,393	

appendix

BV		Adjustment	AV
Cash	$ 5,142	none	$ 5,142
Hedging Assets	$ 2	Remove Level 3	0
Pension Provision	(119)	Hard Liability	(119)
Tax Assets	$ 55	Might be Incaurate	0
Spin-OFF	$ 2,983	Same	$ 2,983
Investment	$ 355	Revlaued at 9x P/B	$ 3,195
Operating Assets	$ 21,697	Below	20581
Debt	$ (21,722)	Same	$ (21,722)
BV	$ 8,393	AV	$ 10,060
Diluted Shares Outstanding	1354		1354
Value per share	$ 6.20		$ 7.43

Intangible + 20% increase on finished good

		Adjustment	
Receivables from Financing A	15,443	NPV (Same Safety)	15,443
Trade Receivables	192	NPV (Same Safety)	192
Inventories	4,228	20% on finished good	4672
Prepaid Expenses and Other	118	none	118
Net PPE	$ 1,697	6 years capex + Land	1536
Intangible Assets	5,159	6 years R&D	3760
Net Leases	1,738	Same	1,738
Trade Payable	(3,531)	NPV (Same Safety) Optimist	(3,531)
Current Liabilites	(1,234)	none	(1,234)
Other Provisions	(2,113)	none	(2,113)
	21,697		20581

Appendix Exhibit share of Mind of consumers

ROCE Estimate and Growth rate

Fiscal	historical (S&P IQ)							2021,2019,2016 fillings		Current				
	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	
Revenue	$ 25,751	$ 26,769	$ 29,856	$ 31,529	$ 32,632	$ 31,196	$ 24,677	$ 23,216	$ 25,769	$ 27,831	$ 26,149	$ 24,285	$ 31,622	
EBITDA	$ 1,374	$ 2,139	$ 3,156	$ 3,181	$ 3,123	$ 3,048	$ 2,139	$ 2,303	$ 2,481	$ 2,953	$ 2,445	$ 1,532	$ 3,368	
MCX	772	588	708	887	955	978	731	776	819	830	743	698	656	
Change In WC	-	1,486	295	(1,416)	(900)	(1,844)	591	773	367	212	(199)	3,422	237	Tangible assets/(tangible assets+intangible)*D&A
EBIT-MCX-chng WC		3,037	2,742	878	1,268	226	1,999	2,300	2,029	2,335	1,503	4,256	2,949	
Net Property, Plant & Equ	$ 6,167	$ 4,402	$ 4,578	$ 6,060	$ 7,119	$ 6,882	$ 6,489	$ 6,412	$ 6,864	$ 5,933	$ 5,769	$ 5,441	$ 5,168	
WC	19,001	20,487	20,782	19,366	18,466	16,622	17,213	17,986	18,353	18,565	18,366	21,788	22,025	
Capital Employed	25,168	24,889	25,360	25,425	25,585	23,504	23,702	24,398	25,217	24,498	24,135	27,229	27,193	PPE + WC (2)
ROCE		12.1%	10.9%	3.5%	5.0%	0.9%	8.5%	9.6%	8.2%	9.4%	6.2%	16.6%	10.8%	EBTDA-MCX-DWC/PPE+WC
ADJ ROCE		0.0%	0.0%	2.6%	3.0%	0.9%	13.5%	17.1%	14.0%	10.9%	6.5%	14.6%	7.5%	ROCE * GCAPEX/ (CFI-Capex)
R & D Exp.	$ 556	$ 556	$ 656	$ 1,129	$ 1,222	$ 1,106	$ 856	$ 860	$ 957	$ 1,061	$ 1,030	$ 932	$ 1,236	
growth in R&D yoy		0.1%	17.9%	72.1%	8.2%	(9.5)%	(22.6)%	0.5%	11.3%	10.9%	(2.9)%	(9.5)%	32.6%	
3years avg growth				30.0%	32.7%	23.6%	(8.0)%	(10.5)%	(3.6)%	7.5%	6.4%	(0.5)%	6.7%	
Depreciation & Amort.	$ 883	$ 679	$ 838	$ 1,039	$ 1,103	$ 1,140	$ 824	$ 883	$ 930	$ 965	$ 853	$ 801	$ 751	
Other Intangibles	4,586	640	631	2,977	796	828	793	772	779	774	790	755	1,326	
Capital Expenditure	$ (1,015)	$ (638)	$ (770)	$ (2,234)	$ (2,666)	$ (2,836)	$ (2,507)	$ (2,134)	$ (2,235)	$ (1,902)	$ (1,962)	$ (1,850)	$ (2,033)	
CFI	404	(574)	(2,944)	(2,597)	(3,788)	(1,970)	(948)	(1,656)	(1,869)	(1,920)	(1,987)	(2,750)	(5,001)	
capex/(CFI-CAPEX)	(251.1)%	111.2%	26.2%	86.0%	70.4%	144.0%	264.5%	128.9%	119.6%	99.1%	98.7%	67.3%	40.7%	
3 year adjustment ofCPX/(CFI-CAPEX)				74.5%	60.9%	100.1%	159.6%	179.1%	171.0%	115.8%	105.8%	88.4%	68.9%	

		2016	2017	2018	2019	2020	2021	MIN	MAX	Average
1	ROCE	9.6%	8.2%	9.4%	6.2%	16.6%	10.8%	6.2%	16.6%	10.1%
	ROCE*3year adj (GCapex/(CFI-GCAP	17.1%	14.0%	10.9%	6.5%	14.6%	7.5%	6.5%	17.1%	11.8%
	growth in R&D	(10.5)%	(3.6)%	7.5%	6.4%	(0.5)%	6.7%	(10.5)%	7.5%	1.0%
	Grwoth in Growth Capex	(14.9)%	4.7%	(14.9)%	3.2%	(5.7)%	9.9%	(14.9)%	9.9%	(3.0)%
	growth in ROCE	12.9%	(14.5)%	14.9%	(34.2)%	168.1%	(34.6)%	(34.6)%	168.1%	18.8%
2	R&D/EBITDA-MCX+/-DWC	37%	39%	36%	42%	61%	37%	35.9%	60.8%	41.9%
1x2	Growth Rate							2.22%	10.08%	4.24%

Appendix:

The AG business is largely made up of large manufacturers, largely due to the prevalence within the industry of larger companies buying out smaller firms. The AG industry relative to other industries produces less volume of vehicles, but at far greater per vehicle costs. This in turn, opens the door to collaboration between the various brands.

Caterpillar Challenger

AGCO Challenger
1991

1 Listen to the market
Products
Warranties supply
'Management CS
)

Latest Technology
Dealers and keep people trained
Dealer with stock and access
Good representation and understanding

Example of consolidation
Caterpillar leader in construction high margins launched the challenger and then sold it to AGCO rational specialization leads to better profitability.

AGCO was a great company in the past introduced the first AG computer.

Also launched AGCO credit

Thin margins now
Deere has the highest margins in the AG space- Caterpillar has the highest margins in the Construction space

Scott Wine appears to have learned a thing or two from AGCO