

VALUATION: Transforming Information into a Model Format

Source materials: Textbook, instructor materials – esp. notes on ROIC and FCFF models.

1) Select a publicly traded manufacturing company of your own choice and use the ROIC / FCFF approach to: Calculate normalized earnings or cash flow as if these numbers are achieved instantaneously (i.e., realized at this very moment in time);

**ROIC = 4% <-- = (\$B\$15\*(1-\$B\$19))/B\$4 <-- = EBIT (1- tax rate) / Total Assets**

**FCFE = \$769.19 (in millions) <-- = Net Income – (Cap Ex. – Depreciation) \* (1 – Debt Ratio)**

2) List the factors or assumptions associated with the normalized earnings or cash flow;

**While there is a more comprehensive line item by line item breakdown in the "ROIC Approach" worksheet, below is the write up of assumptions associated with the normalized earnings or cash flow:**

**John Deere (DE) reported a per share of \$4.81 in 2016, the lowest amount in the last 5 years. The company had assets with a book value of \$57.9 billion, and spent \$2.9 billion on capital expenditures in 2016, with a depreciation of \$1.5 billion. The firm had \$36.2 billion in debt outstanding, on which it paid interest expenses of \$763.7 million, the debt ratio being 47%. The stock has a beta of 0.77, and a tax rate of 31%.**

3) Using the normalized earnings or cash flow as a mid-range number, estimate what you believe are high-end (optimistic) and low-end (pessimistic) earnings or cash flow numbers, and estimate the likelihood or probability of those outcomes in relation to the normalized results.

**Using the normalized cash flow of \$769.19 as a mid-range number, I take into account the 5% growth rate in free cash flow for year 2015, and thus use it to project optimistically into the future; earnings of \$807.65 are thereby realized. Similarly, taking into account the -11% decrease in cash flow for the last fiscal year of 2016, a pessimistic cash flow of \$684.58 is produced. Further refining this procedure, a standard deviation of sample size s (where s = 5) is produced. On the pessimistic side, the standard deviation of this sample size yields a value of 65.54, which yields a mean of \$617.58 and a normal distribution of .14%. On the optimistic side, the probability based on the normal distribution is .28%. There is a higher likelihood of short-term growth on the optimistic side, but it is ultimately offset by the net pessimistic reality that free cash flow has been on a steady decline.**

4) Based on the probability associated with these 3 scenarios, what is the expected value of earnings and/or cash flow?

	2016 t = 1	2017 t = 2	2018 t = 3	2019 t = 4	2020 t = 5	Average	Standard Deviation	Normal Distribution
Optimistic (short term (2015) FCF growth 5%)	\$ 769.19	\$ 807.65	\$ 848.03	\$ 890.43	\$ 934.96	\$ 850.05	65.5361529	0.28%
Pessimistic (low end - 2016) @ -11%	\$ 769.19	\$ 684.58	\$ 609.28	\$ 542.26	\$ 482.61	\$ 617.58	113.396403	0.14%

5) Use of normalized financial results implies a reliance on historical data to predict future outcomes. Under what circumstances would you contemplate departing from historic averages and making your own estimates on the factors that influence valuation of future outcomes? Explain your reasoning.

**First and foremost, SEC rule 156 (using mutual funds as an example) requires the statement that "past performance is not indicative of future results." Similarly, in this fashion, I would shy away from heavily relying on historical data. However, if I were to rely on historical data, I would then use a broader range (going back at least 10 years and maybe more) in order to get a better trend. I would use actual free cash flow numbers from the cash flow statement (not taking depreciation and capital expenditures into account, in a similar fashion to what is provided in the Wall Street Journal). I would then take the last 5 years and run a linear regression to get an R<sup>2</sup> value. If the R<sup>2</sup> is closer to 1, I would use this data as a good estimate of the general trend.**

**Yet, departing from historical data may be necessary to get a better "feel" for the market dynamics, as there are many factors involved in influencing pricing, revenues, and expenses. For instance, a large variability in capital expenditures will offset any predictions based on historical data. In addition, if the free cash flows do not align with profitability within a reasonable forecast period with which I am comfortable with, I would depart from heavily relying on historical data.**

**In conclusion, there are a number of different ways to derive free cash flow on a historical basis (whether one is looking at FCFE (free cash flow to equity) or FCFF (free cash flow to the firm)). Taking historical free cash flow to forecast future results is done under the assumption that the growth rate is constant and aligned with the historical relationships with free cash flow. As such, making this ceteris paribus assumption for a cyclical firm can reduce the value of the forecasting exercise.**

**The learning goals from this assignment are:**

*Further refinement in Valuation and utilization of Accounting data while observing "rules of thumb / normalization."*

**ROIC APPROACH**

**2016**

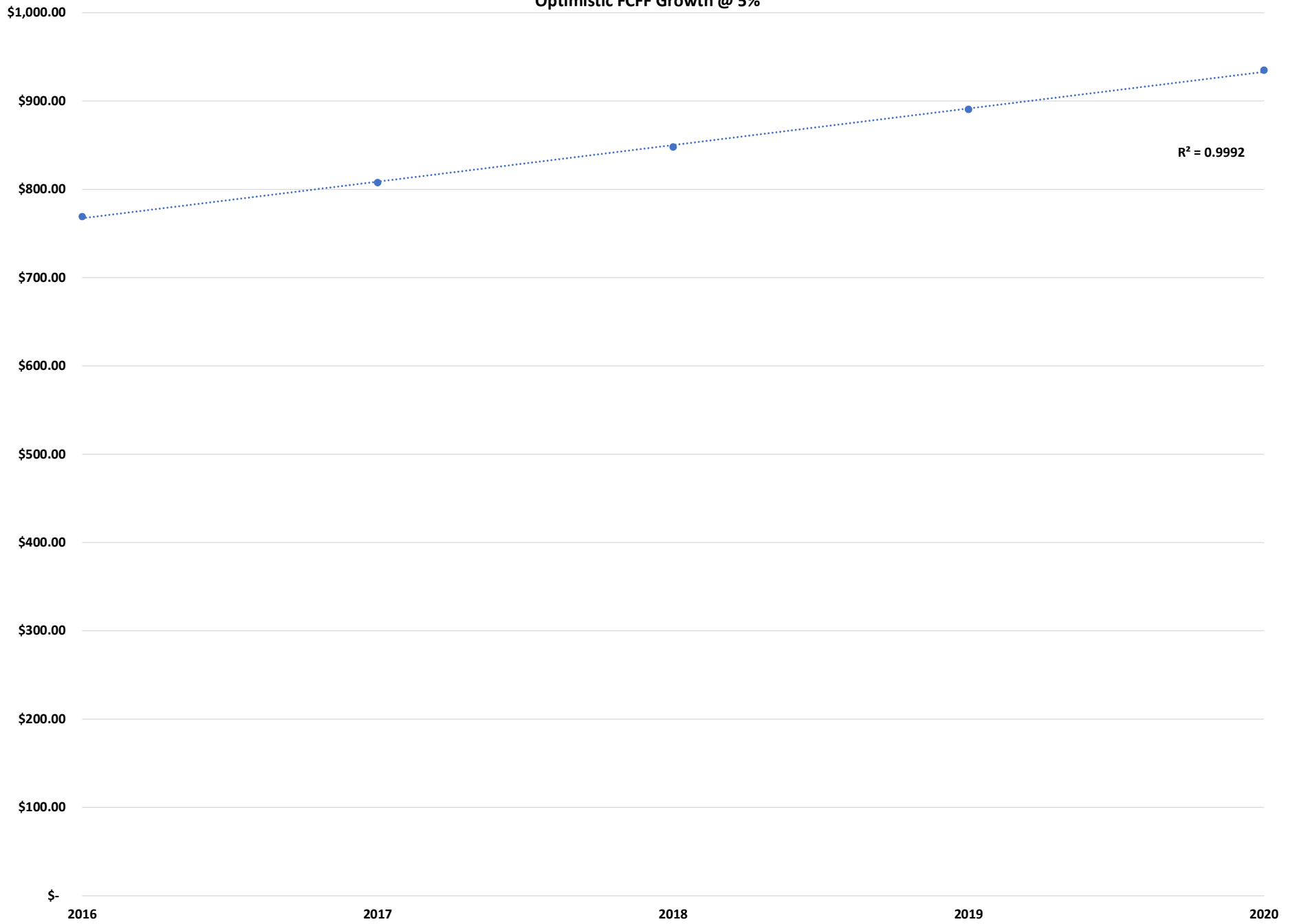
*(In millions of dollars except per share amounts)*

<b>Total Assets in Most Recent Year</b>	\$ 57,981.40	<-- = 'Cons. Inc Smt, Blnce Sheet., CF!B86	
<b>ROIC</b>	<b>4%</b>	<-- = (\$B\$15*(1-\$B\$19))/ \$B\$4	<-- = EBIT (1- tax rate) / Total Assets
<b>Normalized Return on Assets</b>	4%	<-- = \$B\$15*(1-\$B\$19)/ \$B\$4	
<b>Normalized Return on Assets (pre-tax)</b>	5%	<-- = \$B\$15/ \$B\$4	<-- = EBIT/ Total Assets
<b>Debt</b>	\$ 36,261.90	<-- = 'Cons. Inc Smt, Blnce Sheet., CF!B180	<-- = book value of debt
<b>Cost of Debt</b>	2.11%	<-- = 763.7/ B8	<-- interest expense/ book value of debt
<b>Equity - Market Cap</b>	\$ 41,460.00	<a href="#">Source: Yahoo Finance</a>	
<b>Debt/Equity Ratio</b>	0.47	<-- = \$B\$8/(\$B\$8+\$B\$10)	<-- = (D)/(D+E)
<b>Equity/Debt Ratio</b>	0.53	<-- = B10/(B8+B10)	
<b>WACC (using CAPM)</b>	4.41%		
<b>Normalized Income statement (based upon 4% ROIC)</b>			
<b>Earnings Before Interest and Taxes (EBIT)</b>	\$ 2,987.70	<-- = 'Cons. Inc Smt, Blnce Sheet., CF!B22	<-- = Revenues (-) expenses (not taking interest into account)
<b>Interest Expenses</b>	\$ 763.70	<-- = 'Cons. Inc Smt, Blnce Sheet., CF!B19	
<b>Earnings Before Taxes</b>	\$ 2,224.00	<-- = B15-B16	
<b>Taxes (at 31%)</b>	\$ 700.10	<-- = 'Cons. Inc Smt, Blnce Sheet., CF!B26	
<b>Tax Rate (last 2 year average)</b>	31%	<-- = 'Cons. Inc Smt, Blnce Sheet., CF!B28	
<b>Beta</b>	0.77	<a href="#">Source: Yahoo Finance</a>	
<b>Capital Expenditures</b>	\$ 2,955.10	<-- = ABS('Cons. Inc Smt, Blnce Sheet., CF!B153)	
<b>Depreciation</b>	\$ 1,544.80	<-- = 'Cons. Inc Smt, Blnce Sheet., CF!B128	
<b>Net Income</b>	\$ 1,521.50	<-- = B17-B18-2.4	<--(2.4) = Equity in income (loss) of unconsolidated affiliates
<b>(Cap Ex - Depreciation) * (1-Debt ratio)</b>	\$ 752.31	<-- = (B21-B22)*(1-B11)	
<b>FCFE</b>	<b>\$ 769.19</b>	<-- = B23-B24	
<b>US Treasury 10 year Bond Rate</b>	2.39%	<-- = 'US Treasury Bond Rate!J453*0.01	
<b>Market Risk Premium</b>	6%		
<b>Cost of Equity</b>	7.01%	<-- = 0.0239+0.77*(0.06)	<-- = US Treasury Rate + Beta*(Market Risk Premium)
<b>Expected Growth Rate</b>	5%	<-- 0.05	FCF growth in 2015
<b>Value of Equity (1)</b>	\$ 27,598.84		<-- = (FCFE *(1+g))/(cost of equity - growth rate)
<b>Value of Equity (2)</b>	\$ 22,303.29		<-- if John Deere Co. does not reach its normalized earnings in 2 years

	-11%		5%
Using FCFE as Mid-Range #	\$ 684.58	\$ 769.19	\$ 807.65
	Pessimistic	Mid Range	Optimistic

	2016	2017	2018	2019	2020	Average	Standard Deviation	Normal Distribution
	t = 1	t = 2	t = 3	t = 4	t = 5			
Optimistic (short term (2015) FCF growth 5%)	\$ 769.19	\$ 807.65	\$ 848.03	\$ 890.43	\$ 934.96	\$ 850.05	65.5361529	0.28%
						<b>\$ 769.19</b>		
Pessimistic (low end - 2016) @ -11%	\$ 769.19	\$ 684.58	\$ 609.28	\$ 542.26	\$ 482.61	\$ 617.58	113.396403	0.14%

Optimistic FCF Growth @ 5%



## FCFF Approach

2016

*(In millions of dollars except per share amounts)*

Revenues	\$	26,644.00	<--	= 'Cons. Inc Smt, Blnce Sheet., CF'!B9
Net Income	\$	1,521.50	<--	= 'Cons. Inc Smt, Blnce Sheet., CF'!B33
EBIT	\$	2,987.70	<--	= 'Cons. Inc Smt, Blnce Sheet., CF'!B22
Debt Outstanding	\$	36,261.90	<--	= 'Cons. Inc Smt, Blnce Sheet., CF'!B180
Shares outstanding	\$	316.60	<--	= 'Cons. Inc Smt, Blnce Sheet., CF'!B44
Per Share	\$	4.81	<--	= 'Cons. Inc Smt, Blnce Sheet., CF'!B39
Beta		0.77		<a href="#">Source: Yahoo Finance</a>
Tax Rate		31%	<--	= 'Cons. Inc Smt, Blnce Sheet., CF'!B28
Treasury Bond Rate		2.39%	<--	= 'US Treasury Bond Rate'!J453*0.01

		Equity	Debt	Total
Market Value Weight	\$	1,522.85	\$ 36,261.90	\$ 37,784.75
Market Value Weight (as %)		4.03%	95.97%	100.00%
Cost of component (as %)		7.01%	2.11%	9.12%

**Cost of Capital** 2.30% <-- =(B18\*B17)+(C18\*C17)

Year	2012		2013		2014		2015		2016		2017	
	t=1	t=2	t=2	t=3	t=3	t=4	t=4	t=5	t=5	t=6	t=6	
EBIT	\$ 5,517.20	\$ 6,224.70	\$ 6,224.70	\$ 5,461.40	\$ 5,461.40	\$ 3,460.10	\$ 3,460.10	\$ 2,987.70	\$ 2,987.70			
EBIT (1-t)	\$ 3,815.21	\$ 4,304.45	\$ 4,304.45	\$ 3,776.62	\$ 3,776.62	\$ 2,392.70	\$ 2,392.70	\$ 2,066.03	\$ 2,066.03			
Capital Expenditures	\$ (2,121.00)	\$ (2,375.30)	\$ (2,375.30)	\$ (2,659.30)	\$ (2,659.30)	\$ (2,826.10)	\$ (2,826.10)	\$ (2,955.10)	\$ (2,955.10)			
Depreciation	\$ 894.20	\$ 1,026.30	\$ 1,026.30	\$ 1,189.50	\$ 1,189.50	\$ 1,269.40	\$ 1,269.40	\$ 1,544.80	\$ 1,544.80			
Change in Working Capital	\$ (2,697.50)	\$ (1,463.30)	\$ (1,463.30)	\$ (885.60)	\$ (885.60)	\$ 280.10	\$ 280.10	\$ 152.20	\$ 152.20			
<b>FCFF</b>	<b>\$ (109.09)</b>	<b>\$ 1,492.15</b>	<b>\$ 1,492.15</b>	<b>\$ 1,421.22</b>	<b>\$ 1,421.22</b>	<b>\$ 555.90</b>	<b>\$ 555.90</b>	<b>\$ 503.53</b>	<b>\$ 503.53</b>			
Expected Earnings Growth Rate			-1467.80%	-4.75%	-4.75%	-60.89%	-60.89%	-9.42%	-9.42%			
Pessimistic								-9.42%	-9.42%			
Optimistic					-4.75%							

**Present Value** \$ 3,729.43 \$ 4,113.08 \$ 3,527.58 \$ 2,184.67 \$ 1,843.99 \$ 15,398.74

**Terminal Value = 2066.03/ (0.0230-(-0.04))** **\$ 32,794.13**

Value of Equity (based on debt outstanding) \$ (20,863.16)

Value of Equity Per Share \$ (65.90)

**Statement of Consolidated Income**  
**For the Years Ended October 31, 2016, 2015 and 2014**  
(In millions of dollars)

	2016	2015	2014	2013	2012
<b>Net Sales and Revenues</b>					
Net sales	\$ 23,387.3	\$ 25,775.2	\$ 32,960.6	\$ 34,997.9	\$ 33,500.9
Finance and interest income	\$ 2,511.2	\$ 2,381.1	\$ 2,282.1	\$ 2,115.1	\$ 1,981.3
Other income	\$ 745.5	\$ 706.5	\$ 824.2	\$ 682.4	\$ 674.9
<b>Total</b>	<b>\$ 26,644.0</b>	<b>\$ 28,862.8</b>	<b>\$ 36,066.9</b>	<b>\$ 37,795.4</b>	<b>\$ 36,157.1</b>
<i>Revenue Growth Rate (%) (2012 - 2016)</i>	-8%	-20%	-5%	5%	-
<i>Revenue Growth (%) 2009 - 2016</i>	-8%	-20%	-5%	5%	-
<i>Total Revenue Growth (%) 2009 - 2016</i>	8%				
<b>Costs and Expenses</b>					
Cost of sales	\$ 18,248.9	\$ 20,143.2	\$ 24,775.8	\$ 25,667.3	\$ 25,007.8
Research and development expenses	\$ 1,389.1	\$ 1,425.1	\$ 1,452.0	\$ 1,477.3	\$ 1,433.6
Selling, administrative and general expenses	\$ 2,763.7	\$ 2,873.3	\$ 3,284.4	\$ 3,605.5	\$ 3,417.0
Interest expense	\$ 763.7	\$ 680.0	\$ 664.0	\$ 741.3	\$ 782.8
Other operating expenses	\$ 1,254.6	\$ 961.1	\$ 1,093.3	\$ 820.6	\$ 781.5
<b>Total</b>	<b>\$ 24,420.0</b>	<b>\$ 26,082.7</b>	<b>\$ 31,269.5</b>	<b>\$ 32,312.0</b>	<b>\$ 31,422.7</b>
<b>Earnings Before Interest and Taxes (EBIT)</b>	<b>\$ 2,987.7</b>	<b>\$ 3,460.1</b>	<b>\$ 5,461.4</b>	<b>\$ 6,224.7</b>	<b>\$ 5,517.2</b>
<b>Income of Consolidated Group before Income Taxes</b>	\$ 2,224.0	\$ 2,780.1	\$ 4,797.4	\$ 5,483.4	\$ 4,734.4
Provision for income taxes	\$ 700.1	\$ 840.1	\$ 1,626.5	\$ 1,945.9	\$ 1,659.4
Tax Rate	31.48%	30.22%	33.90%	35.49%	35.05%
Average Tax Rate (last 2 years)	30.85%				
<b>Income of Consolidated Group</b>	\$ 1,523.9	\$ 1,940.0	\$ 3,170.9	\$ 3,537.5	\$ 3,075.0
Equity in income (loss) of unconsolidated affiliates	\$ (2.4)	\$ 0.9	\$ (7.6)	\$ 0.1	\$ (3.4)
<b>Net Income</b>	<b>\$ 1,521.5</b>	<b>\$ 1,940.9</b>	<b>\$ 3,163.3</b>	<b>\$ 3,537.6</b>	<b>\$ 3,071.6</b>
Less: Net income (loss) attributable to noncontrolling interests	\$ (2.4)	\$ 0.9	\$ 1.6	\$ 0.3	\$ 6.9
<b>Net Income Attributable to Deere &amp; Company</b>	<b>\$ 1,523.9</b>	<b>\$ 1,940.0</b>	<b>\$ 3,161.7</b>	<b>\$ 3,537.3</b>	<b>\$ 3,064.7</b>
<b>Per Share Data (EPS)</b>					
Basic	\$ 4.83	\$ 5.81	\$ 8.71	\$ 9.18	\$ 7.72
Diluted	\$ 4.81	\$ 5.77	\$ 8.63	\$ 9.09	\$ 7.63
Dividends declared	\$ 2.40	\$ 2.40	\$ 2.22	\$ 1.99	\$ 1.79

**Average Shares Outstanding**

Basic	\$	315.2	\$	333.6	\$	363.0	\$	385.3	\$	397.1
Diluted	\$	316.6	\$	336.0	\$	366.1	\$	389.2	\$	401.5

**Statement of Consolidated Comprehensive Income**  
**For the Years Ended October 31, 2016, 2015, and 2014**

		2016	2015	2014	2013	2012				
<b>Net Income</b>	\$	1,521.5	\$	1,940.9	\$	3,163.3	\$	3,537.6	\$	3,071.6
<b>Other Comprehensive Income (Loss), Net of Income Taxes</b>										
Retirement benefits adjustment	\$	(907.6)	\$	(7.7)	\$	(684.4)	\$	1,950.0	\$	(623.6)
Cumulative translation adjustment	\$	9.0	\$	(935.1)	\$	(415.5)	\$	(70.9)	\$	(270.0)
Unrealized gain (loss) on derivatives	\$	2.9	\$	(2.5)	\$	2.8	\$	10.7	\$	(5.1)
Unrealized gain (loss) on investments	\$	(0.9)	\$	(1.5)	\$	6.9	\$	(11.3)	\$	4.9
<b>Other Comprehensive Income (Loss), Net of Income Taxes</b>	<b>\$</b>	<b>(896.6)</b>	<b>\$</b>	<b>(946.8)</b>	<b>\$</b>	<b>(1,090.2)</b>	<b>\$</b>	<b>1,878.5</b>	<b>\$</b>	<b>(893.8)</b>
<b>Comprehensive Income of Consolidated Group</b>	\$	624.9	\$	994.1	\$	2,073.1	\$	5,416.1	\$	2,177.8
Less: Comprehensive income (loss) attributable to noncontrolling interests	\$	(2.4)	\$	0.5	\$	1.3	\$	0.4	\$	6.6
<b>Comprehensive Income Attributable to Deere &amp; Company</b>	<b>\$</b>	<b>627.3</b>	<b>\$</b>	<b>993.6</b>	<b>\$</b>	<b>2,071.8</b>	<b>\$</b>	<b>5,415.7</b>	<b>\$</b>	<b>2,171.2</b>

**Consolidated Balance Sheet****As of October 31, 2016 and 2015**

(In millions of dollars except per share amounts)

		2016	2015	2014	2013	2012				
<b>Assets</b>										
Cash and cash equivalents	\$	4,335.8	\$	4,162.2	\$	3,787.0	\$	3,504.0	\$	4,652.2
Marketable securities	\$	453.5	\$	437.4	\$	1,215.1	\$	1,624.8	\$	1,470.4
Receivables from unconsolidated affiliates	\$	16.5	\$	33.3	\$	30.2	\$	31.2	\$	59.7
Trade accounts and notes receivable - net	\$	3,011.3	\$	3,051.1	\$	3,277.6	\$	3,758.2	\$	3,799.1
Financing receivables - net	\$	23,702.3	\$	24,809.0	\$	27,422.2	\$	25,632.7	\$	22,159.1
Financing receivables securitized - net	\$	5,126.5	\$	4,834.6	\$	4,602.3	\$	4,153.1	\$	3,617.6
Other receivables	\$	1,018.5	\$	991.2	\$	1,500.3	\$	1,464.0	\$	1,790.9
Equipment on operating leases - net	\$	5,901.5	\$	4,970.4	\$	4,015.5	\$	3,152.2	\$	2,527.8
Inventories	\$	3,340.5	\$	3,817.0	\$	4,209.7	\$	4,934.7	\$	5,170.0
Property and equipment - net	\$	5,170.6	\$	5,181.5	\$	5,577.8	\$	5,466.9	\$	5,011.9
Investments in unconsolidated affiliates	\$	232.6	\$	303.5	\$	303.2	\$	221.4	\$	215.0
Goodwill	\$	815.7	\$	726.0	\$	791.2	\$	844.8	\$	921.2
Other intangible assets - net	\$	104.1	\$	63.6	\$	68.8	\$	77.1	\$	105.0

Retirement benefits	\$ 93.6	\$ 215.6	\$ 262.0	\$ 551.1	\$ 20.2
Deferred income taxes	\$ 2,964.4	\$ 2,767.3	\$ 2,776.6	\$ 2,325.4	\$ 3,280.4
Other assets	\$ 1,694.0	\$ 1,583.9	1496.9	\$ 1,274.7	\$ 1,465.3
Assets held for sale	\$ -	\$ -	\$ -	\$ 505.0	
<b>Total Assets</b>	<b>\$ 57,981.4</b>	<b>\$ 57,947.6</b>	<b>\$ 61,336.4</b>	<b>\$ 59,521.3</b>	<b>\$ 56,265.8</b>

## Liabilities and Stockholders' Equity

### Liabilities

Short-term borrowings	\$ 6,912.2	\$ 8,426.6	\$ 8,019.2	\$ 8,788.9	\$ 6,392.5
Short-term securitization borrowings	\$ 5,002.5	\$ 4,590.0	\$ 4,558.5	\$ 4,109.1	\$ 3,574.8
Payables to unconsolidated affiliates	\$ 81.6	\$ 80.6	\$ 101.0	\$ 106.9	\$ 135.2
Accounts payable and accrued expenses	\$ 7,240.1	\$ 7,311.5	\$ 8,554.1	\$ 8,973.6	\$ 8,988.9
Deferred income taxes	\$ 166.0	\$ 160.8	\$ 160.9	\$ 160.3	\$ 164.4
Long-term borrowings	\$ 23,759.7	\$ 23,832.8	\$ 24,380.7	\$ 21,577.7	\$ 22,453.1
Retirement benefits and other liabilities	\$ 8,274.5	\$ 6,787.7	\$ 6,496.5	\$ 5,416.7	\$ 7,694.9
Liabilities held for sale	\$ -	\$ -	\$ -	\$ 120.4	
<b>Total liabilities</b>	<b>\$ 51,436.6</b>	<b>\$ 51,190.0</b>	<b>\$ 52,270.9</b>	<b>\$ 49,253.6</b>	<b>\$ 49,403.8</b>

Commitments and contingencies (Note 22)

Redeemable noncontrolling interest (Note 4) \$ 14.0

### Stockholders' Equity

Common stock, \$1 par value (authorized – 1,200,000,000 shares; issued – 536,431,204 shares in 2013 and 2012), at paid-in amount..	\$ -	\$ -	\$ 3,675.4	\$ 3,524.2	\$ 3,352.2
Common stock, \$1 par value (authorized – 1,200,000,000 shares; issued – 536,431,204 shares in 2016 and 2015), at paid-in amount	\$ 3,911.8	\$ 3,825.6			
Common stock in treasury, 162,628,440 shares in 2013 and 148,625,875 shares in 2012, at cost	\$ -	\$ -		\$ (10,210.9)	\$ (8,813.8)
Common stock in treasury, 190,926,805 shares in 2014 and 162,628,440 shares in 2013, at cost	\$ -	\$ -	\$ (12,834.2)		
Common stock in treasury, 221,663,380 shares in 2016 and 219,743,893 shares in 2015, at cost	\$ (15,677.1)	\$ (15,497.6)		\$ -	
Retained earnings	\$ 23,911.3	\$ 23,144.8	\$ 22,004.4	\$ 19,645.6	\$ 16,875.2
Accumulated other comprehensive income (loss)	\$ (5,626.0)	\$ (4,729.4)	\$ (3,783.0)	\$ (2,693.1)	\$ (4,571.5)
Total Deere & Company stockholders' equity	\$ 6,520.0	\$ 6,743.4	\$ 9,062.6	\$ 10,265.8	\$ 6,842.1
Noncontrolling interests	\$ 10.8	\$ 14.2	\$ 2.9	\$ 1.9	\$ 19.9
Total stockholders' equity	\$ 6,530.8	\$ 6,757.6	\$ 9,065.5	\$ 10,267.7	\$ 6,862.0
<b>Total Liabilities and Stockholders' Equity</b>	<b>\$ 57,981.4</b>	<b>\$ 57,947.6</b>	<b>\$ 61,336.4</b>	<b>\$ 59,521.3</b>	<b>\$ 56,265.8</b>



## Statement of Consolidated Cash Flows

For the Years Ended October 31, 2016, 2015 and 2014

(In millions of dollars)

	2016	2015	2014	2013	2012
<b>Cash Flows from Operating Activities</b>					
Net income	\$ 1,521.5	\$ 1,940.9	\$ 3,163.3	\$ 3,537.6	\$ 3,071.6
Adjustments to reconcile net income to net cash provided by operating activities:					
Provision for credit losses	\$ 94.3	\$ 55.4	\$ 38.1	\$ 20.5	\$ 5.1
Provision for depreciation and amortization	\$ 1,559.8	\$ 1,382.4	\$ 1,306.5	\$ 1,140.3	\$ 1,004.2
Amortization of Intangible Assets	\$ 15.0	\$ 113.0	\$ 117.0	\$ 114.0	\$ 110.0
Depreciation and Depletion	\$ 1,544.8	\$ 1,269.4	\$ 1,189.5	\$ 1,026.3	\$ 894.2
Impairment charges	\$ 85.1	\$ 34.8	\$ 95.9	\$ 102.0	\$ 33.4
Share-based compensation expense	\$ 70.6	\$ 66.1	\$ 78.5	\$ 80.7	\$ 74.5
Undistributed earnings of unconsolidated affiliates	\$ (1.9)	\$ (1.0)	\$ 9.3	\$ 9.1	\$ 1.8
Provision (credit) for deferred income taxes	\$ 282.7	\$ (18.4)	\$ (280.1)	\$ (172.6)	\$ (91.8)
Changes in assets and liabilities:					
Trade, notes and financing receivables related to sales	\$ 335.2	\$ 811.6	\$ (749.0)	\$ (1,510.2)	\$ (1,901.6)
Insurance receivables		\$ 333.4	\$ (149.9)	\$ 263.4	\$ (338.5)
Inventories	\$ (106.1)	\$ (691.4)	\$ (297.9)	\$ (728.4)	\$ (1,510.2)
Accounts payable and accrued expenses	\$ (155.2)	\$ (503.6)	\$ (137.1)	\$ 217.1	\$ 1,061.8
Accrued income taxes payable/receivable	\$ 1.6	\$ (137.6)	\$ 342.6	\$ 80.4	\$ (72.3)
Retirement benefits	\$ 238.6	\$ 427.5	\$ 336.9	\$ 262.0	\$ 63.3
Other	\$ (161.9)	\$ 40.2	\$ (231.2)	\$ (47.6)	\$ (233.6)
<b>Changes in Working Capital</b>	\$ 152.2	\$ 280.1	\$ (885.6)	\$ (1,463.3)	\$ (2,697.5)
Net cash provided by operating activities	<b>\$ 3,764.3</b>	<b>\$ 3,740.3</b>	<b>\$ 3,525.9</b>	<b>\$ 3,254.3</b>	<b>\$ 1,167.7</b>
<b>Cash Flows from Investing Activities</b>					
Collections of receivables (excluding receivables related to sales)	\$ 14,611.4	\$ 14,919.7	\$ 15,319.1	\$ 14,088.0	\$ 13,064.9
Proceeds from maturities and sales of marketable securities	\$ 169.4	\$ 860.7	\$ 1,022.5	\$ 843.9	\$ 240.3
Proceeds from sales of equipment on operating leases	\$ 1,256.2	\$ 1,049.4	\$ 1,091.5	\$ 936.7	\$ 799.5
Proceeds from sales of businesses and unconsolidated affiliates, net of cash sold	\$ 81.1	\$ 149.2	\$ 345.8	\$ 22.0	\$ 30.2
Cost of receivables acquired (excluding receivables related to sales)	\$ (13,954.5)	\$ (14,996.5)	\$ (17,240.4)	\$ (17,011.7)	\$ (15,139.0)
Purchases of marketable securities	\$ (171.2)	\$ (154.9)	\$ (614.6)	\$ (1,026.3)	\$ (922.2)
Purchases of property and equipment	\$ (644.4)	\$ (694.0)	\$ (1,048.3)	\$ (1,158.4)	\$ (1,319.2)
Cost of equipment on operating leases acquired	\$ (2,310.7)	\$ (2,132.1)	\$ (1,611.0)	\$ (1,216.9)	\$ (801.8)
Subtotal Capital Expenditures	\$ (2,955.1)	\$ (2,826.1)	\$ (2,659.3)	\$ (2,375.3)	\$ (2,121.0)
Acquisitions of businesses, net of cash acquired	\$ (198.5)			\$ (83.5)	
Other	\$ (16.0)	\$ (60.2)	\$ (145.6)	\$ (214.5)	\$ 43.2
Net cash used for investing activities	<b>\$ (1,177.20)</b>	<b>\$ (1,058.70)</b>	<b>\$ (2,881.00)</b>	<b>\$ (4,820.70)</b>	<b>\$ (4,004.10)</b>

**Cash Flows from Financing Activities**

Increase (decrease) in total short-term borrowings	\$ (1,213.6)	\$ 501.6	\$ 89.2	\$ 2,749.4	\$ 894.9
Proceeds from long-term borrowings	\$ 5,070.7	\$ 5,711.0	\$ 8,232.0	\$ 4,734.0	\$ 10,642.0
Payments of long-term borrowings	\$ (5,267.6)	\$ (4,863.2)	\$ (5,209.1)	\$ (4,958.5)	\$ (5,396.0)
Proceeds from issuance of common stock	\$ 36.0	\$ 172.1	\$ 149.5	\$ 174.5	\$ 61.0
Repurchases of common stock	\$ (205.4)	\$ (2,770.7)	\$ (2,731.1)	\$ (1,531.4)	\$ (1,587.7)
Dividends paid	\$ (761.3)	\$ (816.3)	\$ (786.0)	\$ (752.9)	\$ (697.9)
Excess tax benefits from share-based compensation	\$ 5.4	\$ 18.5	\$ 30.8	\$ 50.7	\$ 30.1
Other	\$ (64.7)	\$ (72.1)	\$ (63.6)	\$ (59.3)	\$ (66.2)
<b>Net cash used for financing activities</b>	<b>\$ (2,400.5)</b>	<b>\$ (2,119.1)</b>	<b>\$ (288.3)</b>	<b>\$ 406.5</b>	<b>\$ 3,880.2</b>
<b>Effect of Exchange Rate Changes on Cash and Cash Equivalents</b>	<b>\$ (13.0)</b>			<b>\$ 11.7</b>	<b>\$ (38.8)</b>
<b>Net Increase in Cash and Cash Equivalents</b>	<b>\$ 173.6</b>	<b>\$ 375.2</b>	<b>\$ 283.0</b>	<b>\$ (1,148.2)</b>	<b>\$ 1,005.0</b>
<b>Cash and Cash Equivalents at Beginning of Year</b>	<b>\$ 4,162.2</b>	<b>\$ 3,787.0</b>	<b>\$ 3,504.0</b>	<b>\$ 4,652.2</b>	<b>\$ 3,647.2</b>
<b>Cash and Cash Equivalents at End of Year</b>	<b>\$ 4,335.8</b>	<b>\$ 4,162.2</b>	<b>\$ 3,787.0</b>	<b>\$ 3,504.0</b>	<b>\$ 4,652.2</b>
Net Free Cash Flow (NFCF)	\$ 186.6	\$ 562.5	\$ 356.6	\$ (1,159.9)	\$ 1,043.8
FCF	\$ 809.2	\$ 914.2	\$ 866.6	\$ 879.0	\$ (953.3)
FCF growth rate	-11%	5%	-1%	-192%	-

**Supplemental Cash Flow Information**

Current portion of long term debt	\$ 11,914.7	\$ 13,016.6	\$ 12,557.7	\$ 12,898.0	\$ 9,967.3
Long-Term Debt & Capital Lease Obligation	\$ 23,759.7	\$ 23,832.8	\$ 24,380.7	\$ 21,577.7	\$ 22,453.1
Total debt	\$ 35,674.4	\$ 36,849.4	\$ 36,938.4	\$ 34,475.7	\$ 32,420.4
Book value of debt (d)	\$ 36,261.9				

## Statement of Changes in Consolidated Stocholders' Equity

For the Years Ended October 31, 2012, 2013, 2014, 2015 and 2016

(In millions of dollars)

	Total Stockholders' Equity	Common Stock	Treasury Stock	Retained Earnings	Accumulated Other Comprehensive Income (Loss)	Noncontrolling Interests
<b>Balance October 31, 2011</b>	\$ 6,814.9	\$ 3,251.7	\$ (7,292.8)	\$ 14,519.4	\$ (3,678.0)	\$ 14.6
Net income	\$ 3,071.6			\$ 3,064.7		\$ 6.9
Other comprehensive loss	\$ (893.8)				\$ (893.5)	\$ (0.3)
Repurchases of common stock	\$ (1,587.7)		\$ (1,587.7)			
Treasury shares reissued	\$ 66.7		\$ 66.7			
Dividends declared	\$ (709.2)			\$ (708.9)		\$ (0.3)
Stock options and other	\$ 99.5	\$ 100.5				\$ (1.0)
<b>Balance October 31, 2012</b>	\$ 6,862.0	\$ 3,352.2	\$ (8,813.8)	\$ 16,875.2	\$ (4,571.5)	\$ 19.9
<b>Balance October 31, 2013</b>	\$ 10,267.70	\$ 3,524.20	\$ (10,210.90)	\$ 19,645.60	\$ (2,693.10)	\$ 1.9
Net income	\$ 3,163.30			\$ 3,161.70		\$ 1.6
Other comprehensive loss	\$ (1,090.20)				\$ (1,089.90)	\$ (0.3)
Repurchases of common stock	\$ (2,731.10)		\$ (2,731.10)			
Treasury shares reissued	\$ 107.80		\$ 107.80			
Dividends declared	\$ (803.70)			\$ (803.40)		\$ (0.3)
Stock options and other	\$ 151.70	\$ 151.20		\$ 0.50		
<b>Balance October 31, 2014</b>	\$ 9,065.50	\$ 3,675.40	\$ (12,834.20)	\$ 22,004.40	\$ (3,783.00)	\$ 2.9
Net income	\$ 1,940.9			\$ 1,940.0		\$ 0.9
Other comprehensive loss	\$ (946.8)				\$ (946.4)	\$ (0.4)
Repurchases of common stock	\$ (2,770.7)		\$ (2,770.7)			
Treasury shares reissued	\$ 107.3		\$ 107.3			
Dividends declared	\$ (800.8)			\$ (799.5)		\$ (1.3)
Stock options and other	\$ 162.2	\$ 150.2		\$ (0.1)		\$ 12.1
<b>Balance October 31, 2015</b>	\$ 6,757.60	\$ 3,825.60	\$ (15,497.60)	\$ 23,144.80	\$ (4,729.40)	\$ 14.2
Net income (loss)	\$ 1,521.50			\$ 1,523.90		\$ (2.4)
Other comprehensive loss	\$ (896.60)				\$ (896.60)	
Repurchases of common stock	\$ (205.40)		\$ (205.40)			
Treasury shares reissued	\$ 25.90		\$ 25.90			
Dividends declared	\$ (758.00)			\$ (757.10)		\$ (0.9)
Acquisition (Note 4)						
Stock options and other	\$ 85.80	\$ 86.20		\$ (0.30)		\$ (0.1)
<b>Balance October 31, 2016</b>	\$ 6,530.80	\$ 3,911.80	\$ (15,677.10)	\$ 23,911.30	\$ (5,626.00)	\$ 10.8