Note 14 Stock-Based Compensation

Effective May 19, 2004, the Company adopted its 2004 Incentive Stock Plan, as further amended and restated on February 3, 2015 (the “2004 Stock Plan”), and its 2004 Restricted Stock Plan for Non-Employee Directors, as further amended and restated on April 1, 2013 (the “Director Plan”). On May 19, 2015, the Company’s stockholders approved the 2015 Incentive Plan of 3D Systems Corporation, as further amended and restated on May 16, 2017 (the “2015 Plan” and, together with the 2004 Stock Plan, the “Incentive Plans”).

The 2004 Stock Plan authorizes shares of restricted stock, restricted stock units (“RSU”), stock appreciation rights and the grant of options to purchase shares of the Company’s common stock. The 2004 Stock Plan also designates measures that may be used for performance awards. The Director Plan authorizes shares of restricted stock for non-employee directors of the Company. The 2015 Plan authorizes shares of restricted stock, RSUs, stock appreciation rights, cash incentive awards and the grant of options to purchase shares of the Company’s common stock. The 2015 Plan also designates measures that may be used for performance awards.

Generally, awards granted prior to November 13, 2015 become fully-vested on the three-year anniversary of the grant date and awards granted on or after November 13, 2015 vest one third each year over three years.

Stock-based compensation expense is included in selling, general and administrative expenses in the consolidated statements of operations and comprehensive income (loss). The following table details the components of stock-based compensation expense recognized in net earnings in each of the past three years:

(in thousands)	Year Ended December 31, 2017	2016	2015
Restricted Stock	$ 22,920	$ 28,612	$ 34,733
Stock Options	4,340	2,683	—
Total stock-based compensation expense	$ 27,260	$ 31,295	$ 34,733

Restricted Stock

The Company determines the fair value of restricted stock and RSUs based on the closing price of its stock on the date of grant. The Company generally recognizes compensation expense related to restricted stock and RSUs on a straight-line basis over the period during which the restriction lapses. Forfeitures are recognized in the period in which they occur. A summary of restricted stock and RSU activity during 2017 follows:

(in thousands, except per share amounts)	Number of Shares/Units	Weighted Average Grant Date Fair Value
Outstanding at beginning of period — unvested	3,904	$ 20.54
Granted	2,156	10.62
Cancelled	(420)	15.90
Vested	(1,379)	29.36
Outstanding at end of period — unvested	4,261	$ 13.12

Included in the activity above are 393 shares of restricted stock that vest under specified market conditions, which were awarded to certain employees in 2017 and 2016. Each of these employees was generally awarded two equal tranches of market condition restricted stock that immediately vests when the Company’s common stock trades at either $30 or $40 per share for ninety consecutive calendar days.

At December 31, 2017, there was $2,931 of unrecognized pre-tax stock-based compensation expense related to non-vested restricted stock awards with market conditions, which the Company expects to recognize over a weighted-average period of 1.8 years.

At December 31, 2017, there was $33,202 of unrecognized pre-tax stock-based compensation expense related to all other non-vested restricted stock award shares and units, which the Company expects to recognize over a weighted-average period of 1.8 years.

Stock Options

During the year ended December 31, 2016, the Company awarded certain employees market condition stock options under the 2015 Plan, included in the activity above, that vest under specified market conditions. Each employee was generally awarded two equal tranches of market condition stock options that immediately vest when the Company's common stock trades at either $30 or $40 per share for ninety consecutive calendar days.

The Company recognizes compensation expense related to stock options on a straight-line basis over the derived term of the awards. Forfeitures are recognized in the period in which they occur. The fair value of stock options with market conditions is estimated using a binomial lattice Monte Carlo simulation model. The weighted-average fair value and the assumptions used to measure fair value were as follows:

	Year Ended December 31,		
	2017	**2016**	**2015**
Stock option assumptions:			
Weighted-average fair value	$ —	$ 7.80	$ —
Expected volatility	—	60.0%	—
Risk-free interest rate	—	0.76%-1.46	—
Expected dividend yield	—	0%	—
Derived term in years	—	3-4	—

Stock option activity for the year ended December 31, 2017 was as follows:

	Year Ended December 31, 2017			
(in thousands, except per share amounts)	**Number of Shares**	**Weighted Average Exercise**	**Weighted Average Remaining Contractual Term (in years)**	**Aggregate Intrinsic Value (in thousands)**
Stock option activity:				
Outstanding at beginning of period	2,260	$ 13.92	—	—
Granted	—	—	—	—
Exercised	—	—	—	—
Forfeited and expired	(440)	13.26	—	—
Outstanding at end of period	1,820	$ 14.08	8.50	—

In the table above, intrinsic value is calculated as the excess, if any, between the market price of the Company's stock on the last trading day of the year and the exercise price of the options. Because the market price was lower than the exercise price, the intrinsic value is zero.

At December 31, 2017, there was $7,424 of unrecognized pre-tax stock-based compensation expense related to stock options, which the Company expects to recognize over a weighted-average period of 1.7 years.

Note 15 International Retirement Plan

The Company sponsors a non-contributory defined benefit pension plan for certain employees of a non-U.S. subsidiary initiated by a predecessor of the subsidiary. The Company maintains insurance contracts that provide an annuity that is used to fund the current obligations under this plan. The net present value of the annuity was $3,207 and $2,760 as of December 31, 2017 and 2016, respectively. The net present value of that annuity is included in "Other assets, net" on the Company's consolidated balance sheets at December 31, 2017 and 2016. The following table provides a reconciliation of the changes in the projected benefit obligation for the years ended December 31, 2017 and 2016:

(in thousands)	2017	2016
Reconciliation of benefit obligations:		
Obligations as of January 1	$ 7,727	$ 6,328
Service cost	184	154
Interest cost	131	159
Actuarial (gain) loss	(555)	1,437
Benefit payments	(136)	(120)
Effect of foreign currency exchange rate changes	1,083	(231)
Obligations as of December 31	8,434	7,727
Funded status as of December 31 (net of tax benefit)	$ (8,434)	$ (7,727)

For the year ended December 31, 2017, the Company recorded a $555 gain, net of $244 of actuarial amortization and a $247 tax provision, as a $552 adjustment to "Accumulated other comprehensive income (loss)" in accordance with ASC 715, "*Compensation – Retirement Benefits*." For the year ended December 31, 2016, the Company recorded a $1,437 loss, net of $128 of actuarial amortization and a $407 tax benefit, as a $902 adjustment to "Accumulated other comprehensive income (loss)".

The Company has recognized the following amounts in the consolidated balance sheets at December 31, 2017 and 2016:

(in thousands)	2017	2016
Accrued liabilities	$ 144	$ 114
Other liabilities	8,290	7,613
Projected benefit obligation	8,434	7,727
Accumulated other comprehensive income	(2,555)	(2,775)
Total	$ 5,879	$ 4,952

The following projected benefit obligation and accumulated benefit obligation were estimated as of December 31, 2017 and 2016:

(in thousands)	2017	2016
Projected benefit obligation	$ 8,434	$ 7,727
Accumulated benefit obligation	$ 7,570	$ 6,905

The following table shows the components of net periodic benefit costs and other amounts recognized in other comprehensive income (loss):

(in thousands)	2017	2016
Net periodic benefit cost:		
Service cost	$ 184	$ 154
Interest cost	131	159
Amortization of actuarial loss	244	128
Total	$ 559	$ 441
Other changes in plan assets and benefit obligations recognized in other comprehensive income:		
Net (gain) loss	(555)	1,437
Total expense recognized in net periodic benefit cost and other comprehensive income	$ 4	$ 1,878

The following assumptions are used to determine benefit obligations as of December 31:

	2017	2016
Discount rate	1.80%	1.60%
Rate of compensation	3.00%	3.00%

The following benefit payments, including expected future service cost, are expected to be paid:

(in thousands)		
Estimated future benefit payments:		
2018	$	145
2019		147
2020		163
2021		181
2022		184
2023-2027		1,020

Note 16 Computation of Net Loss per Share

The Company computes basic loss per share using net loss attributable to 3D Systems Corporation and the weighted average number of common shares outstanding during the applicable period. Diluted loss per share incorporates the additional shares issuable upon assumed exercise of stock options and the release of restricted stock and RSUs, except in such case when their inclusion would be anti-dilutive.

(in thousands, except per share amounts)	2017	2016	2015
Numerator for basic and diluted net loss per share:			
Net loss attributable to 3D Systems Corporation	$(66,191)	$(38,419)	$(655,492)
Denominator for basic and diluted net loss per share:			
Weighted average shares	111,554	111,189	111,969
Net loss per share, basic and diluted	$ (0.59)	$ (0.35)	$ (5.85)

For the years ended December 31, 2017, 2016 and 2015, the effect of dilutive securities, including non-vested stock options, restricted stock awards and RSUs, was excluded from the denominator for the calculation of diluted net loss per share because the Company recognized a net loss for the period and their inclusion would be anti-dilutive. Dilutive securities excluded were 5,341, 5,284 and 1,117 for the years ended December 31, 2017, 2016 and 2015, respectively.

Note 17 Noncontrolling Interests

As of December 31, 2017, the Company owned approximately 70% of the capital and voting rights of Robtec, a service bureau and distributor of 3D printing and scanning products in Brazil. Robtec was acquired on November 25, 2014.

As of December 31, 2017, the Company owned approximately 70% of the capital and voting rights of Easyway, a service bureau and distributor of 3D printing and scanning products in China. Approximately 65% of the capital and voting rights of Easyway were acquired on April 2, 2015, and an additional 5% of the capital and voting rights of Easyway were acquired on July 19, 2017 for $2.3 million.

Note 18 Fair Value Measurements

ASC 820, "*Fair Value Measurements and Disclosures*," defines fair value as the exchange price that would be received for an asset or paid to transfer a liability (an exit price) in the principal or most advantageous market for the asset or liability in an orderly transaction between market participants on the measurement date. ASC 820 also establishes a fair value hierarchy that requires an entity to maximize the use of observable inputs that may be used to measure fair value:

Level 1 - Quoted prices in active markets for identical assets or liabilities;

Level 2 - Observable inputs other than Level 1 prices, such as quoted prices for similar assets or liabilities, quoted prices in markets that are not active, or other inputs that are observable or can be corroborated by observable market data for substantially the full term of the assets or liabilities; or

Level 3 - Unobservable inputs that are supported by little or no market activity and that are significant to the fair value of the assets or liabilities.

For the Company, the above standard applies to cash equivalents and earnout consideration. The Company utilizes the market approach to measure fair value for its financial assets and liabilities. The market approach uses prices and other relevant information generated by market transactions involving identical or comparable assets or liabilities.

Assets and liabilities measured at fair value on a recurring basis are summarized below:

	Fair Value Measurements as of December 31, 2017			
(in thousands)	Level 1	Level 2	Level 3	Total
Description				
Cash equivalents [(a)]	$ 20,244	$ —	$ —	$ 20,244
Earnout consideration [(b)]	$ —	$ —	$ 5,115	$ 5,115

	Fair Value Measurements as of December 31, 2016			
(in thousands)	Level 1	Level 2	Level 3	Total
Description				
Cash equivalents [(a)]	$ 25,206	$ —	$ —	$ 25,206
Earnout consideration [(b)]	$ —	$ —	$ 10,806	$ 10,806

(a) Cash equivalents include funds held in money market instruments and are reported at their current carrying value, which approximates fair value due to the short-term nature of these instruments and are included in cash and cash equivalents in the consolidated balance sheet.

(b) The fair value of the earnout consideration, which is based on the present value of the expected future payments to be made to the sellers of the acquired businesses, was derived by analyzing the future performance of the acquired businesses using the earnout formula and performance targets specified in each purchase agreement and adjusting those amounts to reflect the ability of the acquired entities to achieve the stated targets. Given the significance of the unobservable inputs, the valuations are classified in Level 3 of the fair value hierarchy. The change in earnout consideration from December 31, 2016 to December 31, 2017 reflects a payment of $3,206, accretion of $921 and adjustments of $3,406.

The Company did not have any transfers of assets and liabilities between levels of the fair value measurement hierarchy during the year ended December 31, 2017.

In addition to the assets and liabilities included in the above table, certain of our assets and liabilities are to be initially measured at fair value on a non-recurring basis. This includes goodwill and other intangible assets measured at fair value for impairment assessment. For further discussion on the valuation techniques and inputs used in the fair value measurement of goodwill and other intangible assets, see Notes 2, 6 and 7.

Note 19 Income Taxes

The U.S. Tax Cuts and Jobs Act ("Tax Act") was enacted in December 2017. The Tax Act significantly changed U.S. tax law by, among other things, lowering the U.S. corporate income tax rate from 35% to 21% effective January 1, 2018, implementing a territorial tax system and imposing a one-time transition tax on deemed repatriated earnings of foreign subsidiaries.

Deferred tax assets and liabilities are measured using enacted tax rates expected to apply to taxable income in the years in which those temporary differences are expected to reverse. As a result of the reduction in the U.S. corporate income tax rate from 35% to 21% under the Tax Act, the Company revalued its ending net deferred tax liabilities at December 31, 2017 and recognized a provisional $37,889 tax expense that was offset by an adjustment to the Company's valuation allowance of a provisional $37,889 tax benefit.

The Tax Act also provided for a one-time transition tax on the deemed repatriation of post-1986 undistributed foreign subsidiary earnings and profits ("E&P"). The Company recognized a provisional $9,474 of income tax expense related to the transition tax, which was offset by its current year net operating loss. As such, the Company does not expect any cash tax payment to be made in connection with the transition tax.

While the Tax Act provides for a modified territorial tax system, beginning in 2018, global intangible low-taxed income ("GILTI") provisions will result in an incremental tax on low taxed foreign income. The GILTI provisions require the Company to include in its U.S. income tax return foreign subsidiary earnings in excess of an allowable return on the foreign subsidiary's tangible assets. Under U.S. GAAP, the Company is required to make an accounting policy election to either (1) treat taxes due related to GILTI as a current-period expense when incurred (the "period cost method") or (2) factor such amounts into the measurement of the Company's deferred taxes (the "deferred method"). The Company is continuing to evaluate the GILTI tax rules and have not yet adopted a policy to account for the related impacts.

The SEC staff issued Staff Accounting Bulletin No. 118 ("SAB 118") to address the application of U.S. GAAP in situations when a registrant does not have the necessary information available, prepared, or analyzed (including computations) in reasonable detail to complete the accounting for certain income tax effects of the Tax Act and allows the registrant to record provisional amounts during a measurement period not to extend beyond one year of the enactment date. The Company has recognized a net tax expense of $47,362 for the provisional tax impacts related to the one-time transition tax and the revaluation of deferred tax balances which was offset by $47,362 of provisional tax benefit associated to the change in the valuation allowance and included these estimates in the consolidated financial statements for the year ended December 31, 2017. The Company is in the process of analyzing the impact of the various provisions of the Tax Act. The ultimate impact may materially differ from these provisional amounts due to, among other things, additional analysis, changes in interpretations and assumptions, additional regulatory guidance that may be issued, and actions the Company may take as a result of the Tax Act. The Company expects to complete the analysis within the measurement period in accordance with SAB 118.

The components of the Company's income before income taxes are as follows:

	2017	2016	2015
Income (loss) before income taxes:			
Domestic	$ (75,965)	$ (53,868)	$(580,720)
Foreign	18,444	14,056	(74,233)
Total	$ (57,521)	$ (39,812)	$(654,953)

The components of income tax provision for the years ended December 31, 2017, 2016 and 2015 are as follows:

	2017	2016	2015
Current:			
U.S. federal	$ (83)	$ (2,110)	$ 10,753
State	741	30	169
Foreign	12,711	8,099	925
Total	13,369	6,019	11,847
Deferred:			
U.S. federal	—	(1,245)	(5,252)
State	1,097	—	(225)
Foreign	(6,664)	(5,321)	2,602
Total	(5,567)	(6,566)	(2,875)
Total income tax (benefit) provision	$ 7,802	$ (547)	$ 8,972

The overall effective tax rate differs from the statutory federal tax rate for the years ended December 31, 2017, 2016 and 2015 as follows:

	% of Pretax Income		
	2017	2016	2015
Tax provision based on the federal statutory rate	35.0 %	35.0 %	35.0 %
Increase in valuation allowances	48.8	(58.5)	(16.4)
Other	2.9	1.7	(0.4)
Foreign tax rate change	2.2		
Return to provision adjustments	2.0	18.8	(0.7)
State taxes, net of federal benefit, before valuation allowance	1.0	3.9	0.9
Deferred tax adjustments	(1.1)	13.0	—
Uncertain tax positions	(1.4)	(25.1)	(0.5)
Nondeductible expenses	(3.3)	(1.1)	(0.1)
Deemed income related to foreign operations	(4.1)	(8.4)	(0.6)
Employee share-based payments	(13.2)	—	—
One-Time transition tax	(16.5)	—	—
U.S. Tax Cuts and Jobs Act - rate change	(65.9)	—	—
Foreign exchange loss	—	9.4	—
Impairment of definite lived intangibles	—	3.1	—
Foreign income tax rate differential	—	3.1	(2.0)
Impairment of goodwill with no tax basis	—	—	(16.8)
Foreign tax credits related to above	—	6.5	0.2
Effective tax rate	(13.6)%	1.4 %	(1.4)%

The difference between the Company's effective tax rate for 2017 and the federal statutory rate was 48.6 percentage points. The difference in the effective rate is due primarily to the impact of the Tax Act, change in valuation allowances that were recorded during the year, as well as the Company's foreign income inclusions and employee share-based payments that were previously recognized through other comprehensive income.

The difference between the Company's effective tax rate for 2016 and the federal statutory rate was 33.6 percentage points. The Company recorded nondeductible expenses, including non-deductible goodwill impairment charges and a valuation allowance in the U.S. and certain foreign jurisdictions, which contributed to a difference in the effective tax rate.

The difference between the Company's effective tax rate for 2015 and the federal statutory rate was 36.4 percentage points. The Company incurred nondeductible expenses and recognized income for tax purposes, net of tax credits, not included in financial statement income, increasing the effective tax rate. The Company is benefiting from the U.S. domestic production activities deduction and from research credits, reducing the effective tax rate.

During the third quarter of 2017, the Company determined that it is more likely than not that the deferred tax assets related to Phenix Systems would not be realized based on the Company's review of results from operations and other evidence. During the fourth quarter,

it was determined that it was more likely than not that Layerwise, located in Belgium, would realize benefits based on results from operations and utilization of existing net operating losses. There were no other changes to the Company's valuation allowance assertions.

In 2016, there were no changes to the Company's valuation allowance assertions. During the fourth quarter of 2015, based upon the Company's review of results of operations and forecast estimates in connection with the assessment of deferred tax benefits, the Company determined that it is more likely than not that the deferred tax assets in the US and certain foreign jurisdictions will not be realized.

The components of the Company's net deferred income tax assets and net deferred income tax liabilities at December 31, 2017 and 2016 are as follows:

(in thousands)	2017	2016
Deferred income tax assets:		
Intangibles	$ 24,232	$ 40,014
Stock options and restricted stock awards	5,988	14,384
Reserves and allowances	11,308	20,022
Net operating loss carryforwards	35,004	29,398
Tax credit carryforwards	10,908	13,571
Accrued liabilities	3,011	5,330
Deferred revenue	4,629	3,502
Valuation allowance	(80,796)	(109,913)
Total deferred income tax assets	14,284	16,308
Deferred income tax liabilities:		
Intangibles	11,301	16,968
Property, plant and equipment	7,304	8,818
Other	642	—
Total deferred income tax liabilities	19,247	25,786
Net deferred income tax liabilities	$ (4,963)	$ (9,478)

At December 31, 2017, $35,004 of the Company's deferred income tax assets was attributable to $237,186 of gross net operating loss carryforwards, which consisted of $115,846 loss carryforwards for U.S. federal income tax purposes, $101,563 of loss carryforwards for U.S. state income tax purposes and $19,777 of loss carryforwards for foreign income tax purposes.

At December 31, 2016, $29,398 of the Company's deferred income tax assets was attributable to $148,199 of gross operating loss carryforwards, which consisted of $50,587 loss carryforwards for U.S. federal income tax purposes, $78,274 of loss carryforwards for U.S. state income tax purposes and $19,338 of loss carryforwards for foreign income tax purposes.

The net operating loss carryforwards for U.S. federal income tax purposes begin to expire in 2022. The net operating loss carryforwards for U.S. state income tax purposes begin to expire in 2018. In addition, certain loss carryforwards for foreign income tax purposes begin to expire in 2018 and certain other loss carryforwards for foreign purposes do not expire.

At December 31, 2017, tax credit carryforwards included in the Company's deferred income tax assets consisted of $2,845 of research and experimentation credit carryforwards for U.S. federal income tax purposes, $3,745 of research and experimentation tax credit carryforwards for U.S. state income tax purposes, $3,549 of foreign tax credits for U.S. federal income tax purposes, $474 of other U.S. federal tax credits, $170 of research and experimentation tax credit carryforwards for foreign income tax purposes and $600 of other state tax credits. Certain state research and experimentation and other state credits begin to expire in 2024. The Company has recorded a valuation allowance related to the U.S. federal and state tax credits.

At December 31, 2016, tax credit carryforwards included in the Company's deferred income tax assets consisted of $2,544 of research and experimentation credit carryforwards for U.S. federal income tax purposes, $2,649 of research and experimentation tax credit carryforwards for U.S. state income tax purposes, $7,155 of foreign tax credits for U.S. federal income tax purposes, $474 of other U.S. federal tax credits, $149 of research and experimentation tax credit carryforwards for foreign income tax purposes and $600 of other state tax credits. Certain state research and experimentation credits begin to expire in 2017; other state credits begin to expire in 2024. The Company has recorded a valuation allowance related to the U.S. federal and state tax credits.

The Company has provided for $9,474 in tax for the Transition Tax discussed above which has been offset by its 2017 net operating loss. As the Company's previously unremitted earnings have now been subjected to U.S. federal income tax, any repatriation of these earnings to the U.S. would not be expected to incur significant additional taxes related to such amounts. However, the Company's estimates are provisional and subject to further analysis.

Including interest and penalties, the Company increased its unrecognized benefits by $218 for the year ended December 31, 2017 and increased its unrecognized tax benefits by $10,077 for the year ended December 31, 2016. The Company does not anticipate any additional unrecognized tax benefits during the next 12 months that would result in a material change to its consolidated financial position. The Company includes interest and penalties in the Consolidated Financial Statements as a component of income tax expense.

	Unrecognized Tax Benefits		
(in thousands)	**2017**	**2016**	**2015**
Balance at January 1	$ (18,251)	$ (8,296)	$ (1,845)
Increases related to prior year tax positions	(4,104)	(2,658)	—
Decreases related to prior year tax positions	4,045	—	1,475
Increases related to current year tax positions	—	(7,297)	(7,926)
Decreases related to current year tax positions	—	—	—
Decreases in unrecognized liability due to settlements with foreign tax authorities	—	—	—
Balance at December 31	$ (18,310)	$ (18,251)	$ (8,296)

Tax years 2003 through 2017 remain subject to examination by the U.S. Internal Revenue Service, with most of the years open to examination due to the generation and utilization of various tax credits. State income tax returns are generally subject to examination for a period of three to four years after filing the respective tax returns. The impact on such tax returns of any federal changes remains subject to examination by various states for a period of up to one year after formal notification to the states. The Company files income tax returns (which are open to examination beginning in the year shown in parentheses) in Australia (2013), Belgium (2014), Brazil (2012), China (2014), France (2014), Germany (2013), India (2013), Israel (2013), Italy (2012), Japan (2012), Korea (2012), Mexico (2012), Netherlands (2012), Switzerland (2012), the United Kingdom (2016) and Uruguay (2012).

The following presents the changes in the balance of the Company's deferred income tax asset valuation allowance:

Year Ended	**Item**	**Balance at beginning of year**	**Additions (reductions) charged to expense**	**Other**	**Balance at end of year**
2017	Deferred income tax asset valuation allowance	$ 109,913	$ (28,071)	$ (1,046)	$ 80,796
2016	Deferred income tax asset valuation allowance	107,312	20,450	(17,849)	109,913
2015	Deferred income tax asset valuation allowance	—	107,312	—	107,312

Note 20 Segment Information

The Company operates as one segment and conducts its business through various offices and facilities located throughout the Americas region (United States, Canada, Brazil, Mexico and Uruguay), EMEA region (Belgium, France, Germany, Israel, Italy, the Netherlands, Switzerland and the United Kingdom), and Asia Pacific region (Australia, China, India, Japan and Korea). The Company has historically disclosed summarized financial information for the geographic areas of operations as if they were segments in accordance with ASC 280, "*Segment Reporting*." Financial information concerning the Company's geographical locations is based on the location of the selling entity. Such summarized financial information concerning the Company's geographical operations is shown in the following tables:

(in thousands)	**2017**	**2016**	**2015**
Revenue from unaffiliated customers:			
United States	$ 322,399	$ 329,553	$ 345,032
Other Americas	11,377	11,332	12,944
EMEA	220,357	193,141	200,104
Asia Pacific	91,936	98,939	108,083
Total revenue	$ 646,069	$ 632,965	$ 666,163

(in thousands)	2017	2016	2015
Revenue by class of product and service:			
Products	$ 210,280	$ 223,544	$ 257,379
Materials	168,846	156,839	150,740
Services	266,943	252,582	258,044
Total revenue	$ 646,069	$ 632,965	$ 666,163

	Year Ended December 31, 2017				
	Intercompany Sales to				
(in thousands)	Americas	Germany	Other EMEA	Asia Pacific	Total
Americas	$ 2,169	$ 36,914	$ 14,775	$ 20,388	$ 74,246
EMEA	70,709	6,005	13,093	4,945	94,752
Asia Pacific	2,790	—	174	3,936	6,900
Total	$ 75,668	$ 42,919	$ 28,042	$ 29,269	$ 175,898

	Year Ended December 31, 2016				
	Intercompany Sales to				
(in thousands)	Americas	Germany	Other EMEA	Asia Pacific	Total
Americas	$ 3,013	$ 28,881	$ 10,958	$ 21,639	$ 64,491
EMEA	65,209	3,365	8,921	6,091	83,586
Asia Pacific	3,046	—	369	3,959	7,374
Total	$ 71,268	$ 32,246	$ 20,248	$ 31,689	$ 155,451

	Year Ended December 31, 2015				
	Intercompany Sales to				
(in thousands)	Americas	Germany	Other EMEA	Asia Pacific	Total
Americas	$ 3,073	$ 36,552	$ 17,133	$ 17,602	$ 74,360
EMEA	58,489	4,232	9,643	6,172	78,536
Asia Pacific	3,027	4	79	3,585	6,695
Total	$ 64,589	$ 40,788	$ 26,855	$ 27,359	$ 159,591

(in thousands)	2017	2016	2015
Income (loss) from operations:			
Americas	$ (71,951)	$ (53,725)	$ (596,283)
EMEA	(292)	(1,613)	(71,201)
Asia Pacific	20,173	19,591	27,432
Subtotal	(52,070)	(35,747)	(640,052)
Inter-segment elimination	(1,903)	(2,673)	(1,872)
Total	$ (53,973)	$ (38,420)	$ (641,924)

(in thousands)	2017	2016	2015
Depreciation and amortization:			
Americas	$ 25,484	$ 25,892	$ 43,613
EMEA	31,135	29,946	34,596
Asia Pacific	5,422	4,697	4,860
Total	$ 62,041	$ 60,535	$ 83,069

(in thousands)	2017	2016	2015
Capital expenditures:			
Americas	$ 23,925	$ 8,172	$ 14,062
EMEA	5,227	5,947	7,469
Asia Pacific	1,729	2,448	868
Total	$ 30,881	$ 16,567	$ 22,399

	At December 31,		
(in thousands)	2017	2016	2015
Assets:			
Americas	$ 329,550	$ 345,412	$ 382,738
EMEA	454,319	382,163	406,084
Asia Pacific	112,895	121,578	103,137
Total	$ 896,764	$ 849,153	$ 891,959

	At December 31,		
(in thousands)	2017	2016	2015
Cash and cash equivalents:			
Americas	$ 51,475	$ 105,750	$ 98,913
EMEA	52,642	44,877	34,388
Asia Pacific	32,227	34,320	22,342
Total	$ 136,344	$ 184,947	$ 155,643

	At December 31,		
(in thousands)	2017	2016	2015
Long-lived assets:			
Americas	$ 94,319	$ 96,016	$ 113,364
EMEA	306,988	262,543	285,980
Asia Pacific	57,035	57,644	60,148
Total	$ 458,342	$ 416,203	$ 459,492

Note 21 Commitments and Contingencies

The Company leases certain of its facilities and equipment under non-cancelable operating leases. See Note 12.

Supply commitments totaled $83,305 and $62,935 as of December 31, 2017 and 2016, respectively. Commitments for printer assemblies and inventory items at December 31, 2017 and 2016 were $57,592 and $51,156, respectively. Commitments for capital expenditures and operating costs at December 31, 2017 and 2016 were $25,713 and $11,779, respectively.

Certain of the Company's acquisitions contain earnout provisions under which the sellers of the acquired businesses can earn additional amounts. The total liability recorded for these earnouts as of December 31, 2017 and 2016 was $5,115 and $10,806, respectively.

Put Options

Owners of interests in a certain subsidiary have the right in certain circumstances to require the Company to acquire either a portion of or all of the remaining ownership interests held by them. The owners' ability to exercise any such "put option" right is subject to the satisfaction of certain conditions, including conditions requiring notice in advance of exercise. In addition, these rights cannot be exercised prior to a specified exercise date. The exercise of these rights at their earliest contractual date would result in obligations of the Company to fund the related amounts in 2019.

Management estimates, assuming that the subsidiary owned by the Company at December 31, 2017, performs over the relevant future periods at its forecasted earnings levels, that these rights, if exercised, could require the Company, in future periods, to pay approximately $8,872 to the owners of such rights to acquire such ownership interests in the relevant subsidiary. This amount has been recorded as redeemable noncontrolling interests on the Consolidated Balance Sheet at December 31, 2017 and 2016. The ultimate amount payable relating to this transaction will vary because it is dependent on the future results of operations of the subject business.

Indemnification

In the normal course of business, the Company periodically enters into agreements to indemnify customers or suppliers against claims of intellectual property infringement made by third parties arising from the use of the Company's products. Historically, costs related to these indemnification provisions have not been significant, and the Company is unable to estimate the maximum potential impact of these indemnification provisions on its future results of operations.

To the extent permitted under Delaware law, the Company indemnifies its directors and officers for certain events or occurrences while the director or officer is, or was, serving at the Company's request in such capacity, subject to limited exceptions. The maximum potential amount of future payments the Company could be required to make under these indemnification obligations is unlimited; however, the Company has directors and officers insurance coverage that may enable the Company to recover future amounts paid, subject to a deductible and the policy limits. There is no assurance that the policy limits will be sufficient to cover all damages, if any.

Litigation

Securities and Derivative Litigation

The Company and certain of its former executive officers have been named as defendants in a consolidated putative stockholder class action lawsuit pending in the United States District Court for the District of South Carolina. The consolidated action is styled KBC Asset Management NV v. 3D Systems Corporation, et al., Case No. 0:15-cv-02393-MGL. The Amended Consolidated Complaint (the "Complaint"), which was filed on December 9, 2015, alleges that defendants violated the Securities Exchange Act of 1934, as amended (the "Exchange Act"), and Rule 10b-5 promulgated thereunder by making false and misleading statements and omissions and that the former officers are control persons under Section 20(a) of the Exchange Act. The Complaint was filed on behalf of stockholders who purchased shares of the Company's common stock between October 29, 2013, and May 5, 2015 and seeks monetary damages on behalf of the purported class. Defendants filed a motion to dismiss the Complaint in its entirety on January 14, 2016, which was denied by Memorandum Opinion and Order dated July 25, 2016 (the "Order"). Defendants filed a motion for reconsideration of the Order on August 4, 2016, which was denied by Order dated February 24, 2017. On September 28, 2017, the Court granted Lead Plaintiff's Motion for Class Certification. On February 15, 2018, following mediation, the parties entered into a Stipulation of Settlement that provides for, among other things, payment of $50 million by the Company's insurance carriers and a mutual exchange of releases. The Stipulation of Settlement calls for a dismissal of all claims against the Company and the individual defendants with prejudice following Court approval, a denial by defendants of any wrongdoing, and no admission of liability. On February 15, 2018, Lead Plaintiff filed an Unopposed Motion for Preliminary Approval of Class Action Settlement. On February 21, 2018, the Court entered an Order Preliminarily Approving Settlement and Providing for Notice. The final approval hearing has been scheduled for June 25, 2018. A current liability of $50,000 was recorded for the agreed upon settlement amount and an offsetting receivable of $50,000 was recorded for related insurance proceeds.

Nine related derivative complaints have been filed by purported Company stockholders against certain of the Company's former executive officers and members of its Board of Directors. The Company is named as a nominal defendant in all nine actions. The derivatives complaints are styled as follows: (1) Steyn v. Reichental, et al., Case No. 2015-CP-46-2225, filed on July 27, 2015 in the Court of Common Pleas for the 16th Judicial Circuit, County of York, South Carolina ("Steyn"); (2) Piguing v. Reichental, et al., Case No. 2015-CP-46-2396, filed on August 7, 2015 in the Court of Common Pleas for the 16th Judicial Circuit, County of York, South Carolina ("Piguing"); (3) Booth v. Reichental, et al., Case No. 15-692-RGA, filed on August 6, 2015 in the United States District Court for the District of Delaware; (4) Nally v. Reichental, et al., Case No. 15-cv-03756-MGL, filed on September 18, 2015 in the United States District Court for the District of South Carolina ("Nally"); (5) Gee v. Hull, et al., Case No. BC-610319, filed on February 17, 2016 in the Superior Court for the State of California, County of Los Angeles ("Gee"); (6) Foster v. Reichental, et al., Case No. 0:16-cv-01016-MGL, filed on April 1, 2016 in the United States District Court for the District of South Carolina ("Foster"); (7) Lu v. Hull, et al., Case No. BC629730, filed on August 5, 2016 in the Superior Court for the State of California, County of Los Angeles ("Lu"); (8) Howes v. Reichental, et al., Case No. 0:16-cv-2810-MGL, filed on August 11, 2016 in the United States District Court for the District of South Carolina ("Howes"); and (9) Ameduri v. Reichental, et al., Case No. 0:16-cv-02995-MGL, filed on September 1, 2016 in the United States District Court for the District of South Carolina ("Ameduri"). Steyn and Piguing were consolidated into one action styled as In re 3D Systems Corp. Shareholder Derivative Litig., Lead Case No. 2015-CP-46-2225 in the Court of Common Pleas for the 16th Judicial Circuit, County of York, South Carolina. Gee and Lu were consolidated into one action styled as Gee v. Hull, et al., Case No. BC610319 in the Superior Court for the State of California, County of Los Angeles. Nally, Foster, Howes, and Ameduri were

consolidated into one action in the United States District Court for the District of South Carolina with Nally as the lead consolidated case.

The derivative complaints allege claims for breach of fiduciary duty, abuse of control, gross mismanagement, waste of corporate assets and unjust enrichment and seek, among other things, monetary damages and certain corporate governance actions.

All of the derivative complaints listed above have been stayed until the earlier of the close of discovery or the deadline for appealing a dismissal in the KBC Asset Management NV securities class action.

The Company believes the claims alleged in the derivative lawsuits are without merit and intends to defend the Company and its officers and directors vigorously.

Ronald Barranco and Print3D Corporation v. 3D Systems Corporation, et. al.

On August 23, 2013, Ronald Barranco, a former Company employee, filed two lawsuits against the Company and certain officers in the United States District Court for the District of Hawaii. The first lawsuit ("Barranco I") is captioned Ronald Barranco and Print3D Corporation v. 3D Systems Corporation, 3D Systems, Inc., and Damon Gregoire, Case No. CV 13-411 LEK RLP, and alleges seven causes of action relating to the Company's acquisition of Print3D Corporation (of which Mr. Barranco was a 50% shareholder) and the subsequent employment of Mr. Barranco by the Company. The second lawsuit ("Barranco II") is captioned Ronald Barranco v. 3D Systems Corporation, 3D Systems, Inc., Abraham Reichental, and Damon Gregoire, Case No. CV 13-412 LEK RLP, and alleges the same seven causes of action relating to the Company's acquisition of certain website domains from Mr. Barranco and the subsequent employment of Mr. Barranco by the Company. Both Barranco I and Barranco II allege the Company breached certain purchase agreements in order to avoid paying Mr. Barranco additional monies pursuant to royalty and earn out provisions in the agreements. The Company and its officers timely filed responsive pleadings on October 22, 2013 seeking, inter alia, to dismiss Barranco I due to a mandatory arbitration agreement and for lack of personal jurisdiction and to dismiss Barranco II for lack of personal jurisdiction.

With regard to Barranco I, the Hawaii district court, on February 28, 2014, denied the Company's motion to dismiss and its motion to transfer venue to South Carolina for the convenience of the parties. However, the Hawaii court recognized that the plaintiff's claims are all subject to mandatory and binding arbitration in Charlotte, North Carolina. Because the Hawaii court was without authority to compel arbitration outside of Hawaii, the court ordered that the case be transferred to the district court encompassing Charlotte (the United States District Court for the Western District of North Carolina) so that court could compel arbitration in Charlotte. On April 17, 2014, Barranco I was transferred to the United States District Court for the Western District of North Carolina. Plaintiff filed a demand for arbitration on October 29, 2014. On December 9, 2014, the Company filed its answer to plaintiff's demand for arbitration. On February 2, 2015, plaintiff filed an amended demand that removed Mr. Gregoire as a defendant from the matter, and on February 4, 2015 the Company filed its amended answer. The parties selected an arbitrator and arbitration took place in September 2015 in Charlotte, North Carolina.

On September 28, 2015, the arbitrator issued a final award in favor of Mr. Barranco with respect to two alleged breaches of contract and implied covenants arising out of the contract. The arbitrator found that the Company did not commit fraud or make any negligent misrepresentations to Mr. Barranco. Pursuant to the award, the Company is to pay approximately $11,282, which includes alleged actual damages of $7,254, fees and expenses of $2,318 and prejudgment interest of $1,710. The Company disagrees with the single arbitrator's findings and conclusions and believes the arbitrator's decision exceeds his authority and disregards the applicable law. As an initial response, the Company filed a motion for modification on September 30, 2015, based on mathematical errors in the computation of damages and fees. On October 16, 2015, the arbitrator issued an order denying the Company's motion and sua sponte issuing a modified final award in favor of Mr. Barranco in the same above-referenced amounts, but making certain substantive changes to the award, which changes the Company believes were improper and outside the scope of his authority and the American Arbitration Association rules. On November 20, 2015, the Company filed a motion to vacate the arbitration award in the federal court in the United States District Court for the Western District of North Carolina. Claimants also filed a motion to confirm the arbitration award. A hearing was held on the motions on September 29, 2016 in federal court in the Western District of North Carolina. The court requested supplemental briefing by the parties, which briefs were filed on July 11, 2016.

On August 31, 2016, the court issued an order granting in part and denying in part Plaintiff's motion to confirm the arbitration award and for judgment, entering judgment in the principal amount of the arbitration award and denying Plaintiff's motion for fees and costs. The court denied the Company's motion to vacate. On September 7, 2016, Plaintiff filed a motion to amend the judgment to include prejudgment interest. The Company opposed that motion and the parties submitted briefing. On September 28, 2016 the Company filed a motion to alter or amend the judgment. Plaintiff opposed the motion and the parties submitted briefing. On May 18, 2017, the court issued an opinion and order denying the Company's motion to alter or amend and denying Plaintiff's motion for prejudgment interest. On September 16, 2017, the Company filed a notice of appeal with the United States Court of Appeals for the Fourth Circuit. The appeal is pending. The Company filed its Opening Brief and the Joint Appendix on August 28, 2017. Plaintiff filed its Opening Brief on September 11, 2017. The Company filed its Reply Brief on September 25, 2017.

Notwithstanding the Company's right to appeal, given the arbitrator's decision, the Company recorded an $11,282 expense provision for this matter in the quarter ended September 30, 2015. The provision is subject to adjustment based on the ultimate outcome of the Company's appeal. If it is ultimately determined that money is owed following the full appellate process in federal court, the Company intends to fund any amounts to be paid from cash on hand. This amount has been classified as a current liability given the timeline of the appeals process.

With regard to Barranco II, the Hawaii district court, on March 17, 2014, denied the Company's motion to dismiss and its motion to transfer venue to South Carolina. However, the Hawaii court dismissed Count II in plaintiff's complaint alleging breach of the employment agreement. The Company filed an answer to the complaint in the Hawaii district court on March 31, 2014. On November 19, 2014, the Company filed a motion for summary judgment on all claims which was heard on January 20, 2015. On January 30, 2015, the court entered an order granting in part and denying in part the Company's motion for summary judgment. The Order narrowed the plaintiff's claim for breach of contract and dismissed the plaintiff's claims for fraud and negligent misrepresentation. As a result, Messrs. Reichental and Gregoire were dismissed from the lawsuit. The case was tried to a jury in May 2016, and on May 27, 2016 the jury found that the Company was not liable for either breach of contract or breach of the implied covenant of good faith and fair dealing. Additionally, the jury found in favor of the Company on its counterclaim against Mr. Barranco and determined that Mr. Barranco violated his non-competition covenant with the Company. On July 5, 2017, the court ordered a bench trial regarding causation and damages with respect to the equitable accounting on the Company's prevailing counterclaim against Mr. Barranco. The bench trial took place on November 20, 2017. The Court ordered the submission of proposed findings of fact and conclusions of law. The Company submitted its proposed Findings of Fact and Conclusions of Law on January 12, 2018. Barranco submitted his on February 2, 2018. The Company submitted its Reply on February 16, 2018. The Court is expected to rule on the accounting thereafter.

Export Compliance Matter

In October 2017 the Company received an administrative subpoena from the Bureau of Industry and Security of the Department of Commerce ("BIS") requesting the production of records in connection with possible violations of U.S. export control laws, including with regard to its Quickparts.com, Inc. subsidiary. In addition, while collecting information responsive to the above-referenced subpoena, the Company identified potential violations of the International Traffic in Arms Regulations ("ITAR") administered by the Directorate of Defense Trade Controls of the Department of State ("DDTC") and potential violations of the Export Administration Regulations administered by the Bureau of Industry and Security of the Department of Commerce. On February 12, 2018, the Company submitted an initial notice of voluntary disclosure to DDTC in which the Company identified certain potentially unauthorized exports of technical data. The Company is continuing to conduct and internal review and cooperating fully with the investigation, but cannot predict the ultimate resolution of this matter. The Company expects to incur significant legal costs and other expenses in connection with responding to these inquiries.

If the U.S. government finds that the Company has violated one or more export control laws or trade sanctions, the Company could be subject to various penalties. By statute, these penalties can include but are not limited to fines, which by statute may be significant, denial of export privileges, and debarment from participation in U.S. government contracts; and any assessment of penalties could also harm the Company's reputation, create negative investor sentiment, and affect the Company's share value. In connection with any resolution, the Company may also be required to undertake additional remedial compliance measures and program monitoring. The Company cannot at this time predict when BIS and/or DDTC will conclude their investigations or determine an estimated cost, if any, or range of costs, for any penalties or fines that may be incurred upon resolution of this matter.

The Company is involved in various other legal matters incidental to its business. Although the Company cannot predict the results of litigation with certainty, the Company believes that the disposition of all current legal matters will not have a material adverse effect on its consolidated results of operations, consolidated statement of cash flows or consolidated financial position.

Note 22 Accumulated Other Comprehensive Income (Loss)

The changes in the balances of accumulated other comprehensive loss by component are as follows:

(in thousands)	Foreign currency translation adjustment	Defined benefit pension plan	Liquidation of non-US entity and purchase of non-controlling interests	Total
Balance at December 31, 2015	$ (37,675)	$ (1,873)	$ —	$ (39,548)
Other comprehensive income (loss)	(13,063)	(902)	288	(13,677)
Balance at December 31, 2016	(50,738)	(2,775)	288	(53,225)
Other comprehensive income	31,419	220	50	31,689
Balance at December 31, 2017	$ (19,319)	$ (2,555)	$ 338	$ (21,536)

The amounts presented above are in other comprehensive loss and are net of taxes. For additional information about foreign currency translation, see Note 10. For additional information about the pension plan, see Note 15.

Note 23 Selected Quarterly Financial Data (unaudited)

The following tables set forth unaudited selected quarterly financial data:

	2017			
	Quarter Ended			
(in thousands, except per share amounts)	December 31	September 30	June 30	March 31
Consolidated revenue	$ 177,264	$ 152,907	$ 159,467	$ 156,431
Gross profit	85,458	58,522	80,673	80,186
Total operating expenses	91,161	90,857	87,537	89,257
Loss from operations [(a)]	(5,703)	(32,335)	(6,864)	(9,071)
Provision for income taxes	971	3,723	2,067	1,041
Net loss attributable to 3D Systems	(10,134)	(37,670)	(8,416)	(9,971)
Basic and diluted net loss per share	$ (0.08)	$ (0.34)	$ (0.08)	$ (0.09)

	2016			
	Quarter Ended			
(in thousands, except per share amounts)	December 31	September 30	June 30	March 31
Consolidated revenue	$ 165,937	$ 156,362	$ 158,111	$ 152,555
Gross profit	82,890	68,937	80,411	77,513
Total operating expenses	78,817	90,954	84,128	94,272
Income (loss) from operations	4,073	(22,017)	(3,717)	(16,759)
Provision (benefit) for income taxes	(1,212)	(2,214)	1,700	1,179
Net income (loss) attributable to 3D Systems	5,230	(21,213)	(4,648)	(17,788)
Basic and diluted net income (loss) per share	$ 0.05	$ (0.19)	$ (0.04)	$ (0.16)

(in thousands, except per share amounts)	2015 Quarter Ended December 31	September 30	June 30	March 31
Consolidated revenue	$ 183,363	$ 151,574	$ 170,504	$ 160,722
Gross profit	60,160	71,038	81,627	78,984
Total operating expenses	626,081	105,675	105,469	96,508
Loss from operations [a]	(565,921)	(34,637)	(23,842)	(17,524)
Provision (benefit) for income taxes	29,535	(3,524)	(10,096)	(6,943)
Net loss attributable to 3D Systems	(596,366)	(32,249)	(13,696)	(13,181)
Basic and diluted net loss per share	$ (5.32)	$ (0.29)	$ (0.12)	$ (0.12)

(a) For the quarter ended December 31, 2015, loss from operations includes $443,659 of impairment charges related to goodwill and $93,520 of impairment charges related to other intangible assets. In addition, the Company recognized cash and non-cash charges related to the end of life of the Cube printer and shift from consumer products and services, which totaled $8,771 and $18,619, respectively. See Notes 2, 4, 6 and 7 to the Consolidated Financial Statements.

The sum of per share amounts for each of the quarterly periods presented does not necessarily equal the total presented for the year because each quarterly amount is independently calculated at the end of each period based on the net income (loss) available to common stockholders for such period and the weighted average shares of outstanding common stock for such period.

Note 24 Subsequent Events

There are no subsequent events except as disclosed within the Litigation section of Note 21.