

ANSYS Inc.(ANSS)

\$289.22 (As of 02/04/20)

Price Target (6-12 Months): **\$307.00**

Long Term: 6-12 Months

Zacks Recommendation:

Neutral

(Since: 09/06/19)

Prior Recommendation: Outperform

Short Term: 1-3 Months

Zacks Rank: (1-5)

3-Hold

Zacks Style Scores:

VGM:F

Value: F

Growth: D

Momentum: D

Summary

ANSYS is benefiting from the adoption of its engineering simulation software and services. Growing cloud of simulation in repair, maintenance and other overhaul projects is strengthening ANSYS's growth prospects. Moreover, increase in defence spending across Europe & the United States is likely to favour growth in aerospace and defence domains. Robust investments in autonomous vehicles, electrification, smart, connected solutions and 5G too hold promise. Apart from supporting ANSYS to bring innovative solutions to simulations market, Granta Design and Helic buyouts are helping it to fortify foothold in the same. Notably, ANSYS stock has outperformed the industry in a year's time. However, adverse foreign currency exchange rates and integration risks remain concerns. Further, declining perpetual upfront revenues are headwinds.

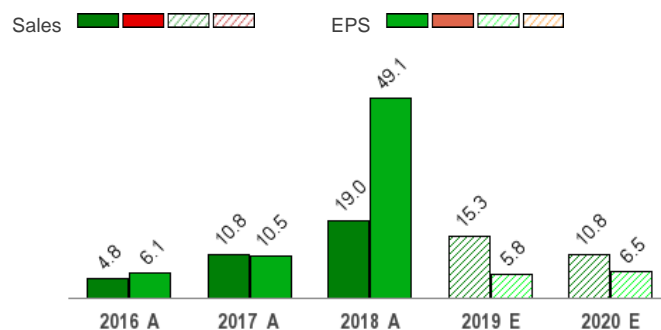
Price, Consensus & Surprise



Data Overview

52 Week High-Low	\$293.43 - \$168.08
20 Day Average Volume (sh)	450,183
Market Cap	\$24.3 B
YTD Price Change	12.4%
Beta	1.41
Dividend / Div Yld	\$0.00 / 0.0%
Industry	Computer - Software
Zacks Industry Rank	Top 29% (74 out of 255)

Sales and EPS Growth Rates (Y/Y %)



Last EPS Surprise	13.6%
Last Sales Surprise	3.6%
EPS F1 Est- 4 week change	0.0%
Expected Report Date	02/26/2020
Earnings ESP	0.0%

Sales Estimates (millions of \$)

	Q1	Q2	Q3	Q4	Annual*
2020	359 E	401 E	386 E	521 E	1,666 E
2019	320 A	371 A	346 A	468 E	1,503 E
2018	283 A	306 A	293 A	418 A	1,303 A

EPS Estimates

	Q1	Q2	Q3	Q4	Annual*
2020	\$1.37 E	\$1.59 E	\$1.51 E	\$2.31 E	\$6.74 E
2019	\$1.29 A	\$1.61 A	\$1.42 A	\$1.99 E	\$6.33 E
2018	\$1.20 A	\$1.35 A	\$1.31 A	\$2.13 A	\$5.98 A

*Quarterly figures may not add up to annual.

P/E TTM	44.8
P/E F1	42.9
PEG F1	NA
P/S TTM	16.9

The data in the charts and tables, including the Zacks Consensus EPS and Sales estimates, is as of 02/04/2020. The reports text is as of 02/05/2020.

Overview

Canonsburg, PA-based ANSYS Inc. develops and globally markets engineering simulation software and services widely used by engineers, designers, researchers and students across a broad spectrum of industries and academia.

ANSYS Workbench, simulation platform is the company's key product. It also provides structural analysis product suite (Explicit Dynamics, Composites), simulation software solutions for Fluids, Electronics, Semiconductors, and Multiphysics.

AIM is a single-window application which integrates structural, fluids and electromagnetics simulation as well as includes all aspects of the simulation workflow. The company's SCADE product suite is a comprehensive solution for embedded software simulation, code production and automated certification.

ANSYS also provides simulation software for 3D modelling, Systems and academics.

Notably, ANSYS Cloud combines high-performance computing (HPC) infrastructure and Microsoft Azure platform with ANSYS software. ANSYS 2019 R1 enables engineers in designing more pervasive simulation solutions across multiple industries.

ANSYS unveiled CES EduPack 2019 with an aim to aid educators in teaching fundamental topics.

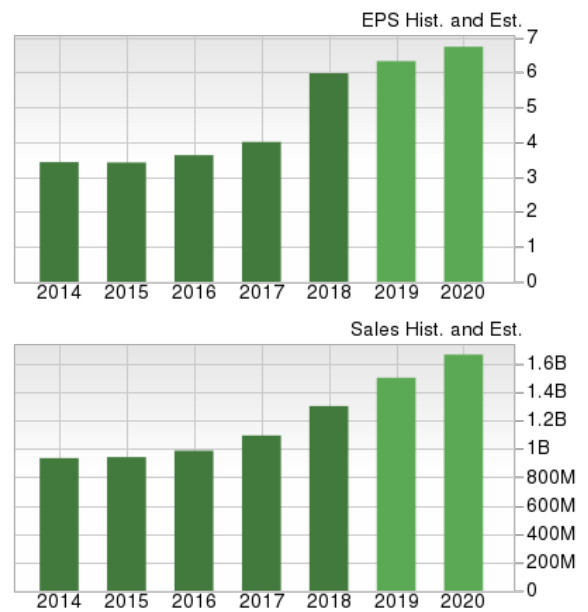
In 2018, revenues increased 11.1% in reported basis to \$1.216 billion as per ASC 605. Under ASC 606, the company reported revenues of \$1.293 billion.

The company generates revenues from two sources: Software licenses (44.6% of 2018 revenues) and Maintenance and service (55.4%).

Per ASC 606, the company derived 39.1% of its revenues from the United States, while the remaining 60.9% came from its foreign operations in 2018.

Direct and indirect revenues contributed 77.6% and 22.4%, respectively, to total revenues in 2018.

ANSYS's peers in computer-aided design (CAD) market include Cadence Design Systems, Inc., Autodesk, Inc. and PTC Inc. and Synopsys, Inc.



Reasons To Buy:

- ▲ ANSYS is a dominant name in the high-end design simulation software market. The company's software solutions are used by most of the well known manufacturing companies. We note that virtual prototyping instead of physical prototyping helps these companies save considerable amount of money. We also note that its best-of-class product portfolio and cross-domain offering will continue to drive customer base going ahead. We also note that it has a diversified customer base, which is evident from the fact that no single customer accounted for more than 5% of revenues in the last three years. Markedly, as of Sep 30, 2019, total deferred revenues and backlog came in at \$650.4 million, reflecting an improvement of 19% on a year-over-year basis.
- ▲ We believe that ANSYS has significant growth opportunity from the rising complexity in product design due to rapid adoption of Internet of Things (IoT) in the manufacturing industry. Moreover, growing demand for energy efficient products is also a key catalyst. These are gradually expanding the company's total addressable market (TAM). We note that ANSYS's robust product portfolio is capable in addressing these needs. The latest ANSYS 18 release offers simulation solutions for developing next-gen 5G product designs, autonomous vehicle, thinner and more reliable mobile and IoT products as well as high-performance chips for advanced driver assistance systems (ADAS). ANSYS recently unveiled the latest Pervasive Engineering Simulation offerings, named ANSYS 19.2, ANSYS 2019 R1 and ANSYS 2019 R2 to accelerate problem-solving capabilities across its comprehensive portfolio. Also, the company unveiled ANSYS Cloud, which combines high-performance computing (HPC) infrastructure and Microsoft Azure platform with ANSYS software. It is anticipated to enhance the company's go-to-market strategy. We believe that the new features in the product are a game changer for ANSYS in the simulation software market.
- ▲ The company's collaborations with advanced technology suppliers, hardware vendors, specialized application developers, and CAD, ECAD and PLM providers is a key catalyst in our view. ANSYS' partnership with CAD vendors – Autodesk, PTC and Siemens – enables data transfer among the CAD systems and the company's products ANSYS-Spatial relationship helps in building the geometry modelling software solutions. Recently, ANSYS also entered into a strategic partnership with AVSimulation with an aim to enhance development of autonomous vehicles (AV). The company also teamed up with BMW Group, which will utilize the company's simulation tools to design robust AV technologies. It is also collaborating with Airbus Defence and Space to develop a new solution, which facilitates AI-driven, secure flight controls to design robust autonomous drone flight control solution by 2030. ANSYS partners Amazon Web Services (AWS) in the cloud computing market. Further, ANSYS unveiled a Ph.D. program in partnership with Indian Institute of Technology Bombay to accelerate research across healthcare and conservation industries. We believe that the strong partner network will help the company win customers more frequently, which will eventually drive top-line growth.
- ▲ Aggressive acquisition strategy has played a pivotal part in developing the company's business in the last few years. Recently, the company acquired Granta Design Limited (Granta Design) and Helic, Inc. (Helic) for a combined consideration of \$261.5 million. The company also acquired certain assets and liabilities of DfR Solutions. The acquisition is aimed at providing customers with designer-level toolkit to investigate for electronics failure at the nascent design stage. ANSYS also completed a number of acquisitions for a total purchase price consideration of \$60 million in the last two years. These along with SpaceClaim Corp (3D modelling technology provider), Reaction Design (chemistry simulation software provider) and Evolutionary Engineering (cloud-based composite analysis and optimization technology provider) acquisitions have enabled the company to offer new and innovative products. We anticipate ANSYS to pursue tuck-in acquisitions, which will further expand product portfolio in the long term.

Dominant player in the high-end simulation software market, new features of ANSYS 18 addresses IoT needs, numerous collaborations & acquisitions expanding product line, favor growth prospects.

Reasons To Sell:

- ▼ ANSYS generates a significant portion (60.9%) of revenues from the International market in 2018. In 2018, a strong U.S. dollar negatively impacted revenues by \$14.6 million. Adverse foreign currency exchange rates are expected to impede revenue growth in the near term owing to the strengthening of the U.S. dollar compared with the Euro and other foreign currencies, which is a significant concern.
- ▼ Moreover, Europe continues to remain a major headwind for ANSYS. The company has taken steps to improve sales execution by changing senior sales leadership. The company is focusing on sharpening its go-to-market strategy. However, uncertainty related to Brexit and overall macro-weakness in the region will continue to hurt top-line growth in the near term.
- ▼ ANSYS faces stiff competition in the computer-aided design (CAD) market from Cadence Design Systems (as it recently ventured into the market with 3D Solver offering), Autodesk, PTC and Synopsys, to mention a few. New entrants are likely to pose a threat to the company's market share. This might compel the company resort to competitive pricing to maintain and capture further market share.
- ▼ Frequent acquisitions have escalated integration risks for ANSYS. Moreover, we also note that the frequent acquisitions negatively impact the company's balance sheet in the form of high level of goodwill and intangible assets, which totaled approximately \$2.04 billion or 56.9% of total assets as of Sep 30, 2019.

Declining perpetual up front revenues, uncertainty over Brexit adverse foreign currency exchange volatility, and integration risks from buyouts, are likely to weigh on ANSYS' financial performance.

Last Earnings Report

ANSYS Q3 Earnings & Revenues Top Estimates

ANSYS Inc. reported third-quarter 2019 non-GAAP earnings of \$1.42 per share, surpassing the Zacks Consensus Estimate of \$1.25. The figure was also higher than management's guided range of \$1.15 per share to \$1.28 per share. Further, the bottom line improved from the year-ago quarter figure of \$1.31 per share.

Non-GAAP revenues of almost \$345.5 million comfortably outpaced the Zacks Consensus Estimate of \$334 million. Further, the figure was higher than management's guided range of \$320 million to \$340 million. Non-GAAP revenues increased approximately 18% from the year-ago quarter, driven by double-digit growth across lease, maintenance and service revenues.

Moreover, robust growth across each of the three major geographies and strong product portfolio drove the quarterly results.

As of Sep 30, 2019, total deferred revenues and backlog came in at \$650.4 million, reflecting an improvement of 19% on a year-over-year basis.

Segment Revenue Details

Software licenses revenues during the reported quarter came in at \$137.1 million, up 25.7% year over year. While Lease licenses revenues improved 67% on the back of higher multi-year contracts, Perpetual revenues were up 2.1% on a year-over-year basis.

Maintenance and Service revenues came in at \$206.8 million, up 14.7% year over year. Notably, individually, maintenance and services revenues improved 13% and 55% year over year, respectively.

Geographic Revenue Details

Region wise, Americas and Asia-Pacific revenues increased 34.7% and 1.8%, respectively, at constant currency. Meanwhile, EMEA revenues were up 18% on a year-over-year basis.

Americas witnessed demand for ANSYS's solutions. Robust investments in data centers, smart, connected solutions and 5G acted as primary catalyst. Customers' focus on utilizing simulation across repair, maintenance and other overhaul projects was a positive. Budgetary increase in allocation for defense spending across Europe and the United States favored growth in aerospace and defense domains.

EMEA revenues were up primarily due to investments in autonomous vehicles, electrification and functional safety. Moreover, robust adoption of 5G was a key growth driver.

Strong performance in China, Japan and South Korea related to 5G, artificial intelligence and semiconductor technologies was a positive in Asia-Pacific region. Robust investments in autonomous vehicles and electrification also acted as a catalyst.

Other Metrics

Direct and indirect businesses contributed 77% and 23%, respectively, to quarterly revenues. ACV increased 12.8% (14.1% on a constant currency basis) from the year-ago quarter to \$290.9 million.

Operating Details

Non-GAAP gross margin came in at approximately 90.1% during the quarter as compared with 90% reported in the year-ago quarter.

Non-GAAP operating margin contracted 70 bps on a year-over-year basis to 43.3% in the reported quarter.

Balance Sheet & Cash Flow

ANSYS exited the quarter with cash and short-term investments of \$732.9 million (the United States comprised 69%) compared with \$631.7 million (the United States comprised 66%) in the previous quarter. The company generated cash from operations of \$120.4 million compared with \$88.5 million in the previous quarter.

Further, the company repurchased 0.3 million shares during the first nine months of fiscal 2019 for approximately \$179.41 per share. As of Sep 30, 2019, the company has 3.5 million shares remaining in the share buyback program.

Key Developments

In the quarter under review, ANSYS inked a deal to acquire Livermore Software Technology Corporation, in a bid to strengthen its explicit dynamics suite and finite element analysis capabilities. With the latest buyout, the company aims to aid developers design cost-efficient and safer vehicles while minimizing costs concerning physical testing.

The acquisition is expected to aid ANSYS in enhancing strength in automotive, avionics and aerospace, and other domains. This is expected to provide a boost ANSYS' financial performance in the days ahead.

Guidance

ANSYS expects non-GAAP earnings in the range of \$1.87 per share to \$2.05 per share for fourth-quarter 2019.

Non-GAAP revenues are anticipated in the range of \$454.1 million to \$479.1 million. Management projects non-GAAP operating margin to be in

Quarter Ending **09/2019**

Report Date	Nov 06, 2019
Sales Surprise	3.59%
EPS Surprise	13.60%
Quarterly EPS	1.42
Annual EPS (TTM)	6.45

the range of 45-46.5% for the fourth quarter.

For 2019, ANSYS updated outlook. The company now anticipates non-GAAP revenues of \$1.490-\$1.515 (previously \$1.460-\$1.500). Non-GAAP earnings are envisioned in the range of \$6.20-\$6.38 per share (previously \$5.98-\$6.28 per share).

The company anticipates operating cash flow for fiscal 2019 to be in the range of \$485-\$510 million (previously \$470-\$510 million). Non-GAAP operating margin is projected to be in the range of 44.5-45% (previously 43.5-44.5%).

Recent News

On Jan 28, 2020, ANSYS released ANSYS 2020 R1, which will enable companies to improve product development with ANSYS Minerva, run complex simulations with streamlined workflows with ANSYS Fluent and optimize electromagnetic design processes with ANSYS HFSS.

On Jan 7, 2020, ANSYS announced collaboration with BlackBerry to minimize risk for autonomous and connected vehicles. Per the terms of the deal, ANSYS SCADE's embedded software development architecture will be integrated with BlackBerry's QNX Neutrino real-time operating system (RTOS).

On Dec 16, 2019, it was reported that ANSYS will join NASDAQ-100 Index on Dec 23.

On Nov 21, 2019, ANSYS announced that its simulation solutions will be utilized in Porsche's first-ever fully electric race car, the Porsche 99X Electric, to design sturdy electric powertrain and enhance energy efficiency.

On Nov 19, 2019, ANSYS expanded partnership with Autodesk, by which ANSYS Mechanical simulation solutions will be integrated with Autodesk Fusion 360, to aid customers reduce time to market.

On Nov 4, 2019, ANSYS announced collaboration with Microsoft. Per the deal, Microsoft Azure Digital Twins will utilize ANSYS Twin Builder to facilitate mutual customers to effectively improve operations and eliminate unscheduled downtime expenses, and accelerate time to market.

Oct 24, 2019, ANSYS inked deal to acquire Dynardo, engaged in providing simulation-based process integration and design optimization (PIDO) technology. The buyout is expected to aid ANSYS deliver comprehensive suite of PIDO-based robust design solutions.

On Sep 12, 2019, ANSYS inked a deal to acquire Livermore Software Technology Corporation, in a bid to strengthen its explicit dynamics suite and finite element analysis capabilities.

Valuation

ANSYS' shares are up 45.8% in the past six-month period and 69.3% over the trailing 12-month period. Stocks in the Zacks sub-industry and the Zacks Computer & Technology sector are up 21.5% and 19.2% in the past six-month period, respectively. Over the past year, the Zacks sub-industry and the sector are up 42.3% and 24.9%, respectively.

The S&P 500 index is up 13.4% in the past six-month period and 18.1% in the past year.

The stock is currently trading at 42.54X forward 12-month earnings, which compares to 28.91X for the Zacks sub-industry, 22.16X for the Zacks sector and 18.61X for the S&P 500 index.

Over the past five years, the stock has traded as high as 49.53X and as low as 23.39X, with a 5-year median of 33.09X. Our Neutral recommendation indicates that the stock will perform in line with the market. Our \$307 price target reflects 45.28X forward 12-month earnings.

The table below shows summary valuation data for ANSS

Valuation Multiples - ANSS					
		Stock	Sub-Industry	Sector	S&P 500
P/E F12M	Current	42.54	28.91	22.16	18.61
	5-Year High	49.53	28.91	22.16	19.34
	5-Year Low	23.39	18.59	16.87	15.18
	5-Year Median	33.09	24.29	19.28	17.46
P/S F12M	Current	14.5	7.33	3.63	3.45
	5-Year High	14.54	7.33	3.63	3.45
	5-Year Low	6.87	3.88	2.3	2.54
	5-Year Median	9.54	5.29	3.02	3
P/B TTM	Current	8.33	10.32	5.49	4.44
	5-Year High	8.33	10.32	5.61	4.54
	5-Year Low	3.27	3.27	3.13	2.85
	5-Year Median	4.79	4.79	4.23	3.62

As of 02/04/2020

Industry Analysis Zacks Industry Rank: Top 29% (74 out of 255)



Top Peers

PTC Inc. (PTC)	Outperform
Autodesk, Inc. (ADSK)	Neutral
Aspen Technology, Inc. (AZPN)	Neutral
Cadence Design Systems, Inc. (CDNS)	Neutral
CommVault Systems, Inc. (CVLT)	Neutral
Open Text Corporation (OTEX)	Neutral
Synopsys, Inc. (SNPS)	Neutral
Pegasystems Inc. (PEGA)	Underperform

Industry Comparison Industry: Computer - Software				Industry Peers		
	ANSS Neutral	X Industry	S&P 500	ADSK Neutral	CDNS Neutral	PTC Outperform
VGM Score	F	-	-	B	C	F
Market Cap	24.35 B	2.07 B	24.31 B	44.87 B	20.88 B	10.06 B
# of Analysts	6	4	13	10	5	7
Dividend Yield	0.00%	0.00%	1.78%	0.00%	0.00%	0.00%
Value Score	F	-	-	D	D	F
Cash/Price	0.03	0.11	0.04	0.02	0.03	0.03
EV/EBITDA	43.39	22.74	13.98	646.43	39.60	78.70
PEG Ratio	NA	2.32	2.01	1.22	3.02	NA
Price/Book (P/B)	8.32	5.67	3.29	NA	14.11	8.06
Price/Cash Flow (P/CF)	47.64	27.29	13.58	367.93	45.09	53.96
P/E (F1)	42.57	32.37	18.82	46.19	31.78	36.69
Price/Sales (P/S)	16.85	4.86	2.66	14.42	9.05	7.57
Earnings Yield	2.33%	2.78%	5.30%	2.16%	3.14%	2.72%
Debt/Equity	0.03	0.18	0.71	-8.92	0.23	1.05
Cash Flow (\$/share)	6.07	1.01	6.92	0.55	1.65	1.61
Growth Score	D	-	-	A	B	F
Hist. EPS Growth (3-5 yrs)	12.93%	10.54%	10.80%	NA	14.82%	-9.02%
Proj. EPS Growth (F1/F0)	6.51%	12.95%	7.40%	59.21%	6.94%	44.77%
Curr. Cash Flow Growth	33.15%	8.40%	10.22%	-149.98%	12.67%	-3.70%
Hist. Cash Flow Growth (3-5 yrs)	6.57%	8.09%	8.55%	-21.89%	6.11%	-9.76%
Current Ratio	2.55	1.49	1.21	0.60	1.70	1.17
Debt/Capital	3.02%	18.94%	42.91%	NA	18.94%	51.32%
Net Margin	30.35%	7.06%	11.79%	4.74%	18.54%	3.38%
Return on Equity	16.65%	12.42%	17.24%	-113.06%	30.74%	13.10%
Sales/Assets	0.42	0.64	0.55	0.64	0.90	0.47
Proj. Sales Growth (F1/F0)	10.88%	7.04%	4.10%	21.71%	6.66%	13.40%
Momentum Score	D	-	-	C	D	D
Daily Price Chg	2.80%	0.85%	1.49%	2.35%	2.18%	2.59%
1 Week Price Chg	-1.09%	-1.95%	-2.60%	-1.17%	-3.31%	-3.41%
4 Week Price Chg	12.68%	2.53%	0.51%	8.77%	4.71%	14.74%
12 Week Price Chg	25.63%	10.30%	4.44%	29.03%	10.12%	18.89%
52 Week Price Chg	69.91%	24.60%	14.65%	33.80%	48.60%	-0.70%
20 Day Average Volume	450,183	70,821	1,935,862	1,376,428	1,283,954	885,163
(F1) EPS Est 1 week change	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
(F1) EPS Est 4 week change	0.00%	0.00%	0.00%	0.00%	0.00%	17.76%
(F1) EPS Est 12 week change	-0.83%	-0.64%	-0.10%	-6.24%	0.00%	3.66%
(Q1) EPS Est Mthly Chg	0.00%	0.00%	0.00%	0.00%	0.00%	14.84%

Zacks Style Scores

The Zacks Style Score is as a complementary indicator to the Zacks rating system, giving investors a way to focus on the highest rated stocks that best fit their own stock picking preferences.

Academic research has proven that stocks with the best Value, Growth and Momentum characteristics outperform the market. The Zacks Style Scores rate stocks on each of these individual styles and assigns a rating of A, B, C, D and F. We also produce the VGM Score (V for Value, G for Growth and M for Momentum), which combines the weighted average of the individual Style Scores into one score. This is perfectly suited for those who want their stocks to have the best scores across the board.

Value Score	F
Growth Score	D
Momentum Score	D
VGM Score	F

As an investor, you want to buy stocks with the highest probability of success. That means buying stocks with a Zacks Recommendation of Outperform, which also has a Style Score of an A or a B.

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