

ANSYS Inc.(ANSS)

\$235.13 (As of 03/30/20)

Price Target (6-12 Months): \$252.00

Long Term: 6-12 Months	Zacks Reco	Neutral	
	(Since: 09/06/	19)	
	Prior Recomm	endation: Outpe	rform
Short Term: 1-3 Months	Zacks Rank:	: (1-5)	3-Hold
	Zacks Style S	cores:	VGM:F
	Value: F	Growth: C	Momentum: D

Summary

ANSYS is benefiting from the acquisition synergies and growth across lease, maintenance and service revenues. Additionally, robust adoption of its engineering simulation software and services, bode well. Growing clout of simulation in repair, maintenance and other overhaul projects is strengthening ANSYS's growth prospects. Apart from supporting ANSYS to bring innovative solutions to simulations market, Dynardo and Livermore Software buyouts are helping it to fortify foothold in the same. Notably, ANSYS stock has outperformed the industry in a year's time. However, the company provided bleak first-quarter guidance. ANSYS expects the coronavirus outbreak in China to delay ACV and its related revenues to the second half of the year. Adverse foreign currency exchange rates and integration risks remain other concerns.

Data Overview

52 Week High-Low	\$299.06 - \$174.25
20 Day Average Volume (sh)	1,003,196
Market Cap	\$20.2 B
YTD Price Change	-8.7%
Beta	1.43
Dividend / Div Yld	\$0.00 / 0.0%
Industry	Computer - Software
Zacks Industry Rank	Top 26% (66 out of 254)

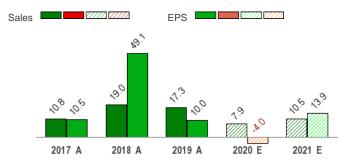
Last EPS Surprise	12.6%
Last Sales Surprise	4.4%
EPS F1 Est- 4 week change	-2.8%
Expected Report Date	05/06/2020
Earnings ESP	0.0%

P/E TTM	35.8
P/E F1	37.2
PEG F1	NA
P/S TTM	13.3

Price, Consensus & Surprise



Sales and EPS Growth Rates (Y/Y %)



Sales Estimates (millions of \$)

*Quarterly figures may not add up to annual.

	Q1	Q2	Q3	Q4	Annual*
2021	350 E	432 E	435 E	617 E	1,821 E
2020	310 E	386 E	393 E	558 E	1,648 E
2019	320 A	371 A	346 A	492 A	1,528 A

EPS Estimates

	Q1	Q2	Q3	Q4	Annual*
2021	\$2.56 E	\$1.14 E	\$1.62 E	\$1.69 E	\$7.20 E
2020	\$1.99 E	\$0.80 E	\$1.44 E	\$1.52 E	\$6.32 E
2019	\$1.29 A	\$1.61 A	\$1.42 A	\$2.24 A	\$6.58 A

The data in the charts and tables, including the Zacks Consensus EPS and Sales estimates, is as of 03/30/2020. The reports text is as of 03/31/2020.

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.

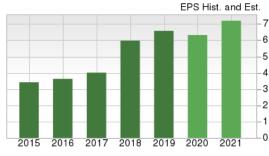
In 2019, ANSYS reported revenues of \$1.516 billion.

The company generates revenues from two sources: Software licenses (46.2% of 2019 revenues) and Maintenance and service (53.8%).

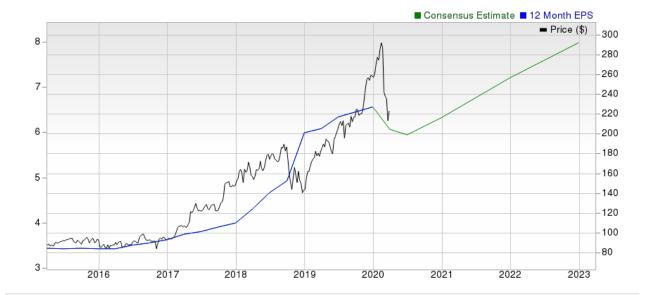
The company derived 45.3% of its revenues from Americas, while the remaining 54.7% came from its foreign operations in 2019.

Direct and indirect revenues contributed 76% and 23%, respectively, to total revenues in 2019.

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 Dec 31, 2019, total deferred revenues and backlog came in at \$871 million, reflecting an improvement of 32% on a year-over-year basis.

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.

- ▲ 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 nextgen 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 Al-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, ANSYS concluded acquisition of 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. The company has also acquired Livermore Software Technology Corporation (LSTC), in a bid to strengthen its explicit dynamics suite and finite element analysis capabilities. LSTC and Dynardo, both acquired in the fourth quarter, contributed a combined \$8.8 million and \$6.7 million to non-GAAP revenues and annual contract value (ACV), respectively. These along with Granta Design, 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.

Reasons To Sell:

- ▼ ANSYS generates a significant portion (56%) of revenues from the International market in 2019. In 2019, fluctuations in the exchange rates of foreign currencies against the U.S. Dollar negatively impacted revenues by \$24.2 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.
- 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.
- ▼ 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 \$2.89 billion or 59.7% of total assets as of Dec 31, 2019.

Last Earnings Report

ANSYS Q4 Earnings Top Estimates

ANSYS reported fourth-quarter 2019 non-GAAP earnings of \$2.24 per share, which beat the Zacks Consensus Estimate by 12.6% and also increased 5.2% year over year.

Non-GAAP revenues of \$492.5 million comfortably outpaced the Zacks Consensus Estimate of \$334 million and improved 17.8% from the year-ago quarter as well.

As of Dec 31, 2019, total deferred revenues and backlog came in at \$870.7 million, reflecting a 32% surge on a year-over-year basis.

Quarter Ending	12/2019
Report Date	Feb 26, 2020
Sales Surprise	4.43%
EPS Surprise	12.56%
Quarterly EPS	2.24
Annual EPS (TTM)	6.56

Top-Line Details

Software licenses revenues were \$268.9 million, up 18.8% year over year. Lease licenses revenues improved 32% at constant currency (cc) on the back of increase in the value of multi-year lease contracts. Perpetual revenues increased 5.3% year over year.

Maintenance and Service revenues came in at \$217.3 million, up 15% year over year. Notably, maintenance and services revenues improved 15% and 27%, respectively, year over year, respectively.

Service revenue growth reflected broader adoption of the company's simulation tools and benefits from acquisitions.

Direct and indirect businesses contributed 79% and 21%, respectively, to quarterly revenues. ACV increased 13% at cc on a year-over-year basis.

Livermore Software Technology (LSTC) and Dynardo, both acquired in the fourth quarter, contributed a combined \$8.8 million and \$6.7 million to non-GAAP revenues and annual contract value (ACV), respectively.

On a geographic basis, revenues from Americas, EMEA (comprising Germany, the United Kingdom and other EMEA) and the Asia-Pacific (Japan and Other Asia-Pacific) accounted for 44.2%, 29.6% and 26.2% of the total revenues, respectively.

Moreover, at cc, revenues from Americas, EMEA and the Asia-Pacific increased 20.8%, 29.1% and 2% year over year, respectively.

Operating Details

Fourth-quarter non-GAAP gross margin expanded 40 basis points (bps) on a year-over-year basis to 92%.

Selling, general & administrative expenses as a percentage of revenues increased 220 bps to 34.1%. Research & development expenses as a percentage of revenues were 34.4%, up 200 bps year over year.

Non-GAAP operating margin contracted 360 bps on a year-over-year basis to 48% in the reported quarter.

Balance Sheet & Cash Flow

As of Dec 31, 2019, cash and short-term investments of \$872.4 million (the United States comprised 72%) compared favorably with \$732.9 million (the United States comprised 69%) as of Sep 30, 2019.

The company generated cash from operations of \$139.5 million compared with \$120.4 million in the previous quarter.

Further, the company repurchased 0.3 million shares in 2019 at an average price of \$179.41 per share. As of Dec 31, 2019, the company had 3.5 million shares remaining under the share buyback program.

Key Development

ANSYS released Ansys 2020 R1 solution, which includes Ansys Minerva, a knowledge management application platform during the quarter.

ANSYS also announced several partnerships with entities like Rockwell Automation, TAG Heuer Porsche Formula E Team, Autodesk, BlackBerry Limited, AEye and FLIR Systems.

Guidance

ANSYS expects the coronavirus outbreak in China to delay ACV and its related revenues to the second half of the year. Originally, the same was planned for the first half. Moreover, trade restrictions imposed on certain entities that were put into effect in 2019 are expected to persist in 2020.

ANSYS expects non-GAAP earnings in the range of 75-88 cents per share for first-quarter 2020.

Non-GAAP revenues are anticipated between \$300 million and \$320 million.

Management projects non-GAAP operating margin in the range of 27.5-30% for the first quarter.

For 2020, ANSYS anticipates non-GAAP revenues of \$1.640-\$1.7 billion. Non-GAAP earnings are envisioned in the range of \$6.19-\$6.71 per share.

ACV is anticipated between \$1.605 billion and \$1.650 billion.

Non-GAAP operating margin is expected in the range of 42-43%.

The company anticipates operating cash flow for 2020 in the range of \$500-\$530 million.

Recent News

On Mar 16, 2020, ANSYS announced that Physical Optics Corporation (POC) is utilizing its simulation software solutions to design avionics for U.S. military aircraft.

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.

Valuation

ANSYS' shares are up 8.4% in the past six-month period and 25.4% over the trailing 12-month period. Stocks in the Zacks sub-industry are up 7.6%, while stocks in the Zacks Computer & Technology sector are down 2.3% in the past six-month period. Over the past year, the Zacks sub-industry is up 14.3%, while the sector is down 2.1%.

The S&P 500 index is down 10.6% in the past six-month period and 8.9% in the past year.

The stock is currently trading at 35.95X forward 12-month earnings compared with 25.73X for the Zacks sub-industry, 19X for the Zacks sector and 16.13X for the S&P 500 index.

Over the past five years, the stock has traded as high as 52.05X and as low as 23.39X, with a 5-year median of 33.6X. Our Neutral recommendation indicates that the stock will perform in line with the market. Our \$252 price target reflects 38.53X forward 12-month earnings.

The table below shows summary valuation data for ANSS

	Valuation M	unapie	5 - ANSS		
		Stock	Sub-Industry	Sector	S&P 500
	Current	35.95	25.73	19	16.13
P/E F12M	5-Year High	52.05	28.78	22.02	19.34
	5-Year Low	23.39	18.62	16.85	15.18
	5-Year Median	33.6	24.63	19.3	17.44
	Current	11.82	6.47	3.06	2.85
P/S F12M	5-Year High	14.79	7.23	3.59	3.43
	5-Year Low	6.87	3.88	2.3	2.54
	5-Year Median	9.66	5.34	3.06	3
	Current	5.73	8.82	4.12	3.53
P/B TTM	5-Year High	7.45	10.56	5.35	4.55
	5-Year Low	3.27	4.03	3.13	2.85
	5-Year Median	4.89	6.36	4.26	3.63

As of 03/30/2020

Industry Analysis Zacks Industry Rank: Top 26% (66 out of 254)

■ Industry Price ■ Price -300 -280 Industry 140 260 130 240 120 -220 -200 110 180 100 -160 140 90 120 80 -100 -80 70 2018 2020 2016 2017 2019

Top Peers

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
Pegasystems Inc. (PEGA)	Neutral
PTC Inc. (PTC)	Neutral
Synopsys, Inc. (SNPS)	Neutral

Industry Comparison Industry: Computer - Software				Industry Peers		
	ANSS Neutral	X Industry	S&P 500	ADSK Neutral	CDNS Neutral	PTC Neutra
VGM Score	E	-	-	В	C	F
Market Cap	20.20 B	1.40 B	18.21 B	34.23 B	18.75 B	6.85 B
# of Analysts	7	2	13	10	6	7
Dividend Yield	0.00%	0.00%	2.3%	0.00%	0.00%	0.00%
Value Score	F	-	-	D	F	F
Cash/Price	0.05	0.12	0.06	0.06	0.04	0.04
EV/EBITDA	32.80	15.22	11.22	73.21	29.58	55.92
PEG Ratio	NA	2.11	1.74	0.84	2.81	NA
Price/Book (P/B)	5.73	4.18	2.41	NA	8.90	5.49
Price/Cash Flow (P/CF)	35.85	17.90	9.70	74.22	16.83	36.72
P/E (F1)	37.28	26.30	15.12	36.22	27.57	25.88
Price/Sales (P/S)	13.33	3.77	1.96	10.45	8.02	5.15
Earnings Yield	2.69%	3.63%	6.55%	2.76%	3.63%	3.86%
Debt/Equity	0.15	0.16	0.70	-14.71	0.16	1.05
Cash Flow (\$/share)	6.56	1.20	7.01	2.10	3.98	1.61
Growth Score	C	-	-	Α	A	F
Hist. EPS Growth (3-5 yrs)	14.19%	11.15%	10.89%	NA	21.57%	-9.02%
Proj. EPS Growth (F1/F0)	-3.91%	12.92%	1.80%	54.27%	10.30%	39.63%
Curr. Cash Flow Growth	8.84%	11.19%	5.93%	280.74%	138.95%	-3.70%
Hist. Cash Flow Growth (3-5 yrs)	7.79%	9.27%	8.55%	8.91%	24.55%	-9.76%
Current Ratio	2.24	1.50	1.23	0.83	1.74	1.17
Debt/Capital	12.98%	20.16%	42.57%	NA	14.13%	51.32%
Net Margin	29.77%	7.06%	11.64%	6.55%	42.33%	3.38%
Return on Equity	15.76%	11.82%	16.74%	-165.74%	62.01%	13.10%
Sales/Assets	0.40	0.64	0.54	0.63	0.84	0.47
Proj. Sales Growth (F1/F0)	7.85%	5.42%	2.08%	19.45%	8.49%	11.70%
Momentum Score	D	-	-	В	C	F
Daily Price Chg	5.43%	0.46%	2.63%	10.13%	7.43%	0.44%
1 Week Price Chg	4.65%	9.16%	12.32%	-4.36%	13.07%	21.80%
4 Week Price Chg	-9.15%	-16.68%	-18.22%	-18.30%	-2.12%	-20.64%
12 Week Price Chg	-7.64%	-22.02%	-23.36%	-16.68%	-5.56%	-22.29%
52 Week Price Chg	25.44%	-7.73%	-17.22%	-4.83%	3.26%	-37.58%
20 Day Average Volume	1,003,196	108,506	4,211,236	3,387,443	3,091,235	1,700,242
(F1) EPS Est 1 week change	-2.11%	0.00%	-0.19%	-0.74%	0.00%	-1.98%
(F1) EPS Est 4 week change	-2.85%	-0.07%	-3.07%	-2.94%	-2.58%	-4.81%
(F1) EPS Est 12 week change	-9.63%	-0.63%	-4.15%	-4.45%	-5.92%	12.09%
(Q1) EPS Est Mthly Chg	-1.90%	-0.46%	-2.28%	-1.71%	-1.52%	-7.48%

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	C
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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