

#### **ANSYS Inc.(ANSS)** Long Term: 6-12 Months Zacks Recommendation: Neutral (Since: 09/08/19) \$269.87 (As of 05/22/20) Prior Recommendation: Outperform Price Target (6-12 Months): \$285.00 3-Hold Short Term: 1-3 Months Zacks Rank: (1-5) VGM:F Zacks Style Scores: Value: F Growth: D Momentum: C

# **Summary**

ANSYS' Q1 results were hurt by declining software licenses revenues, which more than offset growth in Maintenance and Service revenues. Negative business impacts across China owing to COVID-19 outbreak and trade restrictions affected performance. Further, the company trimmed 2020 view. Nevertheless, new deal wins in high-tech vertical across the Asia-Pacific aided growth. Strength in automotive sector and growing clout of cost-effective 3D printing solutions fueling demand for additive manufacturing solutions, contributed to growth in the EMEA region. Notably, ANSYS stock has outperformed the industry on a year-to-date basis. Robust investments by means of acquisitions across autonomous vehicles, connected solutions and 5G domains hold promise. However, performance across Americas was impacted by reduction in multi-year lease contracts.

### **Data Overview**

PEG F1

P/S TTM

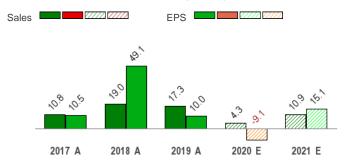
52 Week High-Low	\$299.06 - \$174.25
20 Day Average Volume (sh)	541,423
Market Cap	\$23.1 B
YTD Price Change	4.8%
Beta	1.21
Dividend / Div Yld	\$0.00 / 0.0%
Industry	Computer - Software
Zacks Industry Rank	Bottom 49% (127 out of 248)

Last EPS Surprise	6.4%
Last Sales Surprise	0.7%
EPS F1 Est- 4 week change	-5.3%
Expected Report Date	NA
Earnings ESP	0.0%
P/E TTM	44.2
P/E F1	45.1

# Price, Consensus & Surprise



# Sales and EPS Growth Rates (Y/Y %)



# Sales Estimates (millions of \$)

	Q1	Q2	Q3	Q4	Annual*
2021	352 E	409 E	414 E	604 E	1,767 E
2020	309 A	354 E	373 E	555 E	1,594 E
2019	320 A	371 A	346 A	492 A	1,528 A
EPS E	stimates				
	Q1	Q2	Q3	Q4	Annual*
2021	\$1.19 E	\$1.53 E	\$1.59 E	\$2.70 E	\$6.88 E
2020	\$0.83 A	\$1.16 E	\$1.42 E	\$2.55 E	\$5.98 E

\$1.42 A

\$2.24 A

\$6.58 A

\*Quarterly figures may not add up to annual.

\$1.61 A

\$1.29 A

The data in the charts and tables, including the Zacks Consensus EPS and Sales estimates, is as of 05/22/2020. The reports text is as of 05/26/2020.

2019

NA

15.4

#### 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.

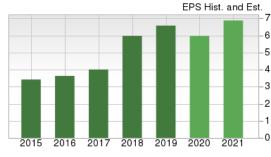
In 2019, ANSYS reported revenues of \$1.516 billion.

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

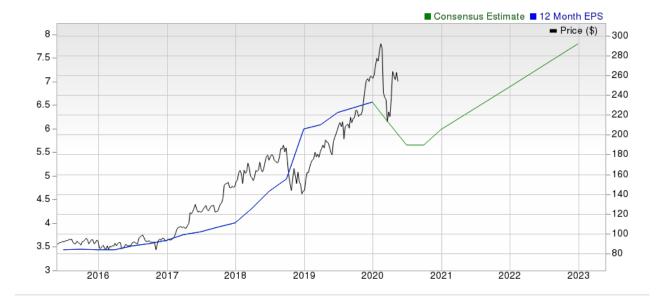
The company derived 45.3% of its revenues from Americas, while the remaining 54.7% came from its foreign operations in 2019.

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 Mar 31, 2020, total deferred revenues and backlog came in at \$835 million, reflecting an increase of 24% on a year-over-year basis.

Dominant player in the high-end simulation software market, new features of products addressing 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.
- Analogement execution has been good in recent times. As of Mar 31, 2020, cash and short-term investments of \$718 million (the United States accounted for 60%). As of Mar 31, 2020, the company has an unsecured term loan with an outstanding principal balance of \$425 million. Notably, the debt agreement currently requires no principal payments through the next 12 months. This provides them the flexibility required to pursue any growth strategy, whether by way of acquisitions or otherwise. Moreover, total debt to total capital of 13.9% is lower than industry's figure of 42.9%. Further, times interest earned is 66.1X, compared with the industry's figure of 17.6X. Also, cash from operations in the first quarter was \$147.4 million compared with \$139.5 million in the prior quarter. The strong cash flows help ANSYS to continue shareholder friendly initiatives of share repurchase. Notably, lower number of outstanding shares favors the bottom line. In the first quarter, the company repurchased 0.7 million shares in first quarter at an average price of \$233.48 per share. As of Mar 31, 2020, the company had 2.8 million shares remaining under the share buyback program. The company's ability to generate solid cash flow is also expected to help it sustain share buybacks, at least in the near 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 \$2.87 billion or 63.1% of total assets as of Mar 31, 2020.

# **Last Earnings Report**

#### ANSYS Q1 Earnings Top Estimates, Coronavirus Dims '20 View

ANSYS reported first-quarter 2020 non-GAAP earnings of 83 cents per share, which beat the Zacks Consensus Estimate by 6.4%. The bottom line declined 35.7% year over year.

Non-GAAP revenues of \$308.9 million declined 3.4% (down 2.6% at constant currency or cc) from the year-ago quarter. Decline in multi-year lease contracts weighed on the top line.

Negative business impacts across China owing to COVID-19 outbreak and trade restrictions affected the first quarter performance.

Report Date	May 06, 2020
Sales Surprise	0.68%
EPS Surprise	6.41%
Quarterly EPS	0.83
Annual EPS (TTM)	6.10

**Quarter Ending** 

03/2020

As of Mar 31, 2020, total deferred revenues and backlog came in at \$835 million, reflecting an increase of 24% on a year-over-year basis.

#### **Top-Line Details**

Total revenues came in nearly \$305 million, down 3.8% year over year. Software licenses revenues (28.8% of total revenues) were \$87.8 million, down 28.6% year over year. Maintenance and Service revenues (71.2% of total revenues) came in at \$217.2 million, up 11.9% year over year.

Lease licenses revenues (14.5% of non-GAAP revenues) declined 35% at cc to \$44.9 million due to an anticipated and substantial reduction in multi-year lease contracts. Perpetual licenses revenues (13.9%) fell 19.7% year over year at cc to \$43 million.

Maintenance revenues and Service revenues improved 12.2% and 33%, year over year, at cc, to \$204.3 million and \$16.7 million, contributing 66.1% and 5.4% to non-GAAP revenues, respectively. Service revenue growth reflected broader adoption of the company's simulation tools and benefits from acquisitions.

Direct and indirect channels contributed 73% and 27%, respectively, to non-GAAP revenues. ACV remained flat year over year on cc basis.

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 43.1%, 29.2% and 27.7% of non-GAAP revenues, respectively.

Notably, at cc, revenues from Americas declined 9.7%, while revenues from EMEA and the Asia-Pacific improved 1.1% and 6.2% year over year, respectively.

New deal wins in high-tech and automotive verticals across the Asia-Pacific aided growth. Strength in automotive sector with growing clout of cost-effective 3D printing solutions fueling demand for additive manufacturing solutions, favored growth in the EMEA region. Meanwhile, performance across Americas was due to anticipated reduction in multi-year lease contracts.

# **Operating Details**

Non-GAAP gross margin contracted 310 basis points (bps) on a year-over-year basis to 88%, owing to lower revenue base.

Selling, general & administrative expenses as a percentage of total revenues expanded 740 bps to 42.8%. Research & development expenses as a percentage of revenues expanded 590 bps year over year to 28.2%.

Non-GAAP operating margin came in at 29.3% compared with 42.9% reported in the year-ago quarter on account of decline in gross margin and higher expenses.

#### **Balance Sheet & Cash Flow**

As of Mar 31, 2020, cash and short-term investments of \$718 million (the United States comprised 60%) compared with \$872.4 million (the United States comprised 72%) as of Dec 31, 2019.

As of Mar 31, 2020, the company has an unsecured term loan with an outstanding principal balance of \$425 million. Notably, the debt agreement currently requires no principal payments through the next 12 months.

The company generated cash from operations of \$147.4 million compared with \$139.5 million in the prior quarter.

Further, the company repurchased 0.7 million shares in first quarter at an average price of \$233.48 per share. As of Mar 31, 2020, the company had 2.8 million shares remaining under the share buyback program.

## Guidance

ANSYS expects the coronavirus outbreak to delay ACV and related revenues to the second half of the year. 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 \$1.01-\$1.33 per share for second-quarter 2020.

Non-GAAP revenues are anticipated between \$335 million and \$375 million.

Management projects non-GAAP operating margin in the range of 33.5-39%.

For 2020, ANSYS has trimmed guidance. The company now expects non-GAAP revenues of \$1.555-\$1.63 billion compared with the prior range of \$1.64-\$1.70 billion.

Non-GAAP earnings are now envisioned in the range of \$5.61-\$6.23 per share (mid-point of \$5.92) compared with the prior range of \$6.19-\$6.71.

ACV is now anticipated between \$1.5 billion and \$1.575 billion compared with the prior range of \$1.605-\$1.650 billion.

Non-GAAP operating margin is now expected in the range of 40-42%, compared with the earlier guided range of 42-43%.

The company now anticipates operating cash flow for 2020 in the range of \$425-\$470 million compared with the previous range of \$500-\$530 million.

### **Recent News**

On May 19, ANSYS announced that it is joining forces with Microsoft, Dell and Lendlease to accelerate and simplify the development and implementation of digital twin technologies across multiple industries.

On May 6, ANSYS announced that it has attained certification for its RedHawk system-on-chip (SoC) power noise signoff platform for all Taiwan Semiconductor Manufacturing Company or TSMC's advanced process nodes technologies.

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

On Jan 28, 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, 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).

### **Valuation**

ANSYS' shares are up 4.9% in the year-to-date period and 48.2% over the trailing 12-month period. Stocks in the Zacks sub-industry and the Zacks Computer & Technology sector are up 10.3% and 2.7% in the year-to-date period, respectively. Over the past year, the Zacks sub-industry and sector are up 26.5% and 19.4%, respectively.

The S&P 500 index is down 8.1% in the year-to-date period and up 4.5% in the past year.

The stock is currently trading at 42.58X forward 12-month earnings, which compares to 29.5X for the Zacks sub-industry, 24.06X for the Zacks sector and 21.51X for the S&P 500 index.

Over the past five years, the stock has traded as high as 53.07X and as low as 23.39X, with a 5-year median of 34.21X. Our Neutral recommendation indicates that the stock will perform in line with the market. Our \$285 price target reflects 44.97X forward 12-month earnings.

The table below shows summary valuation data for ANSS

Valuation Multiples - ANSS						
		Stock	Sub-Industry	Sector	S&P 500	
	Current	42.58	29.5	24.06	21.51	
P/E F12M	5-Year High	53.07	29.5	24.06	21.51	
	5-Year Low	23.39	18.62	16.72	15.23	
	5-Year Median	34.21	24.85	19.24	17.49	
	Current	13.89	7.3	3.66	3.33	
P/S F12M	5-Year High	14.79	7.3	3.66	3.44	
	5-Year Low	6.87	3.88	2.32	2.53	
	5-Year Median	9.8	5.51	3.1	3.01	
	Current	15.29	7.44	4.14	2.88	
EV/Sales TTM	5-Year High	16.21	8.11	4.43	3.46	
	5-Year Low	6.65	3.19	2.59	2.14	
	5-Year Median	9.84	5.7	3.57	2.82	

As of 05/22/2020

# Industry Analysis Zacks Industry Rank: Bottom 49% (127 out of 248)

#### ■ Industry Price Industry ■ Price \_300 -100 -80

# **Top Peers**

Company (Ticker)	Rec Rank
Company (Ticker)	Nec Italik
Autodesk, Inc. (ADSK)	Neutral 3
Aspen Technology, Inc. (AZPN)	Neutral 4
Cadence Design Systems, Inc. (CDNS)	Neutral 3
CommVault Systems, Inc. (CVLT)	Neutral 3
Open Text Corporation (OTEX)	Neutral 4
Pegasystems Inc. (PEGA)	Neutral 2
PTC Inc. (PTC)	Neutral 2
Synopsys, Inc. (SNPS)	Neutral 2

Industry Comparison Industry	rison Industry: Computer - Software			Industry Peers			
	ANSS	X Industry	S&P 500	ADSK	CDNS	PTC	
Zacks Recommendation (Long Term)	Neutral	-	-	Neutral	Neutral	Neutra	
Zacks Rank (Short Term)	3	-	-	3	3	2	
VGM Score	<b>E</b>	-	-	В	С	В	
Market Cap	23.10 B	1.55 B	20.16 B	42.91 B	24.11 B	8.12 E	
# of Analysts	6	4	14	10	6	(	
Dividend Yield	0.00%	0.00%	2.11%	0.00%	0.00%	0.00%	
Value Score	F	-	-	D	D	C	
Cash/Price	0.03	0.10	0.07	0.05	0.04	0.11	
EV/EBITDA	37.87	18.32	12.07	91.68	37.82	60.78	
PEG Ratio	NA	2.65	2.72	1.07	2.81	N/	
Price/Book (P/B)	7.02	5.32	2.77	NA	11.17	6.38	
Price/Cash Flow (P/CF)	41.15	21.64	10.95	93.20	21.64	43.49	
P/E (F1)	45.13	29.62	20.22	46.53	35.00	30.55	
Price/Sales (P/S)	15.36	4.36	2.12	13.11	10.14	5.92	
Earnings Yield	2.22%	3.09%	4.71%	2.15%	2.86%	3.28%	
Debt/Equity	0.16	0.16	0.76	-14.71	0.16	1.04	
Cash Flow (\$/share)	6.56	1.18	6.96	2.10	3.98	1.61	
Growth Score	D	-	-	Α	C	В	
Hist. EPS Growth (3-5 yrs)	14.49%	9.72%	10.87%	NA	27.77%	-2.79%	
Proj. EPS Growth (F1/F0)	-9.17%	-5.00%	-10.31%	50.82%	11.74%	40.16%	
Curr. Cash Flow Growth	8.84%	8.84%	5.46%	280.74%	138.95%	-3.70%	
Hist. Cash Flow Growth (3-5 yrs)	7.79%	8.71%	8.55%	8.91%	24.55%	-9.76%	
Current Ratio	2.40	1.47	1.29	0.83	1.38	1.13	
Debt/Capital	13.88%	23.05%	44.54%	NA	13.82%	50.87%	
Net Margin	27.34%	6.84%	10.54%	6.55%	41.74%	4.67%	
Return on Equity	13.73%	11.18%	16.27%	-165.74%	55.35%	15.35%	
Sales/Assets	0.37	0.63	0.54	0.63	0.77	0.44	
Proj. Sales Growth (F1/F0)	4.28%	1.82%	-2.49%	17.64%	9.40%	8.46%	
Momentum Score	C	-	-	В	В	C	
Daily Price Chg	1.35%	0.02%	0.12%	0.53%	-0.07%	0.46%	
1 Week Price Chg	-3.46%	-2.88%	-4.56%	-1.94%	-0.47%	-9.15%	
4 Week Price Chg	4.22%	8.44%	5.28%	11.52%	7.79%	9.14%	
12 Week Price Chg	10.53%	1.39%	-8.60%	8.38%	30.70%	-7.65%	
52 Week Price Chg	49.84%	6.38%	-6.15%	15.48%	35.04%	-17.18%	
20 Day Average Volume	541,423	123,529	2,645,192	1,346,233	2,152,417	875,468	
(F1) EPS Est 1 week change	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	
(F1) EPS Est 4 week change	-5.26%	-1.64%	-3.80%	-1.03%	0.00%	16.38%	
(F1) EPS Est 12 week change	-15.68%	-8.56%	-16.57%	-8.48%	3.87%	3.06%	
(Q1) EPS Est Mthly Chg	-23.87%	0.00%	-7.64%	-1.08%	0.00%	23.39%	

# **Zacks Stock Rating System**

We offer two rating systems that take into account investors' holding horizons: Zacks Rank and Zacks Recommendation. Each provides valuable insights into the future profitability of the stock and can be used separately or in combination with each other depending on your investment style.

### **Zacks Recommendation**

The Zacks Recommendation aims to predict performance over the next 6 to 12 months. The foundation for the quantitatively determined Zacks Recommendation is trends in the company's estimate revisions and earnings outlook. The Zacks Recommendation is broken down into 3 Levels; Outperform, Neutral and Underperform. Unlike many Wall Street firms, we have an excellent balance between the number of Outperform and Neutral recommendations. Our team of 70 analysts are fully versed in the benefits of earnings estimate revisions and how that is harnessed through the Zacks quantitative rating system. But we have given our analysts the ability to override the Zacks Recommendation for the 1200 stocks that they follow. The reason for the analyst over-rides is that there are often factors such as valuation, industry conditions and management effectiveness that a trained investment professional can spot better than a quantitative model.

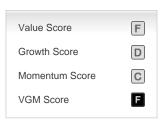
### **Zacks Rank**

The Zacks Rank is our short-term rating system that is most effective over the one- to three-month holding horizon. The underlying driver for the quantitatively-determined Zacks Rank is the same as the Zacks Recommendation, and reflects trends in earnings estimate revisions.

# **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.



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.

#### **Disclosures**

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