

Activision Blizzard (ATVI)

\$69.92 (As of 06/03/20)

Price Target (6-12 Months): **\$80.00**

Long Term: 6-12 Months

Zacks Recommendation:

Outperform

(Since: 05/21/20)

Prior Recommendation: Neutral

Short Term: 1-3 Months

Zacks Rank: (1-5)

1-Strong Buy

Zacks Style Scores:

VGM:F

Value: D

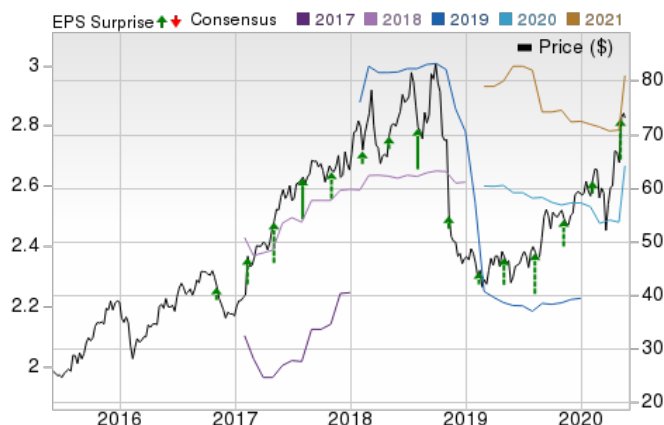
Growth: F

Momentum: B

Summary

Activision Blizzard's top line is expected to benefit from a sturdy gaming portfolio. *Call of Duty: Modern Warfare* has been a huge hit. The company also gained traction from the launch of *Call of Duty: Warzone* that added 60 million players within a short span of time. Moreover, solid demand for games amid coronavirus-led lockdowns and enforcement of shelter-at-home guidelines is a key catalyst. Moreover, the growing popularity of *World of Warcraft*, *Hearthstone* and *Candy Crush Saga* are major drivers for the long haul. Notably, its shares have outperformed the industry year to date. However, strengthening of the U.S. dollar is expected to hurt net bookings and earnings in 2020. Moreover, stiff competition from the likes of Electronic Arts and Take Two Interactive is a headwind.

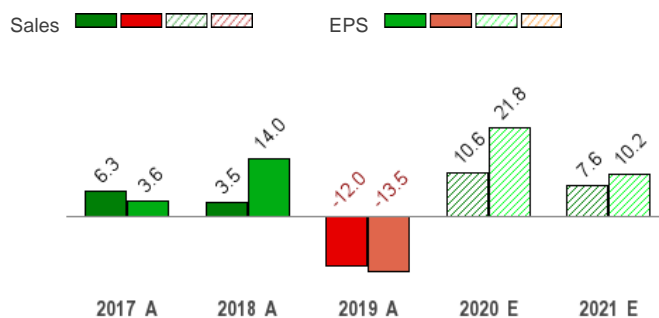
Price, Consensus & Surprise



Data Overview

52 Week High-Low	\$75.97 - \$42.25
20 Day Average Volume (sh)	7,771,710
Market Cap	\$53.9 B
YTD Price Change	17.7%
Beta	0.62
Dividend / Div Yld	\$0.41 / 0.6%
Industry	Toys - Games - Hobbies
Zacks Industry Rank	Top 4% (11 out of 253)

Sales and EPS Growth Rates (Y/Y %)



Last EPS Surprise	48.7%
Last Sales Surprise	15.7%
EPS F1 Est- 4 week change	9.6%
Expected Report Date	08/13/2020
Earnings ESP	0.0%
P/E TTM	27.9
P/E F1	25.5
PEG F1	2.5
P/S TTM	8.4

Sales Estimates (millions of \$)

	Q1	Q2	Q3	Q4	Annual*
2021	1,452 E	1,733 E	1,597 E	2,879 E	7,600 E
2020	1,522 A	1,685 E	1,321 E	2,530 E	7,064 E
2019	1,258 A	1,207 A	1,214 A	2,708 A	6,388 A

EPS Estimates

	Q1	Q2	Q3	Q4	Annual*
2021	\$0.50 E	\$0.67 E	\$0.63 E	\$1.37 E	\$3.02 E
2020	\$0.58 A	\$0.68 E	\$0.38 E	\$1.10 E	\$2.74 E
2019	\$0.31 A	\$0.38 A	\$0.32 A	\$1.23 A	\$2.25 A

*Quarterly figures may not add up to annual.

The data in the charts and tables, including the Zacks Consensus EPS and Sales estimates, is as of 06/03/2020. The reports text is as of 06/04/2020.

Overview

Activision Blizzard, Inc. is a leading developer and publisher of console, online and mobile games. The company's *Call of Duty* is one of the most popular gaming franchises globally. Its *Overwatch League* can be considered a pioneer of the esports concept.

Activision Blizzard benefited from the shift to digital download format. The company's policy of updating games all the year round increased revenue visibility and stability.

Moreover, the acquisition of King Digital in 2016 fortified Activision's footprint in the mobile genre. King's *Candy Crush* was the top-grossing franchise in U.S. app stores during 2019.

Activision reported revenues of \$6.49 billion in 2019. International revenues accounted for 48.5% of revenues.

The Santa Monica, CA-based company operates under three major segments and incorporates studio, media networks and distribution businesses under the "Others" segment.

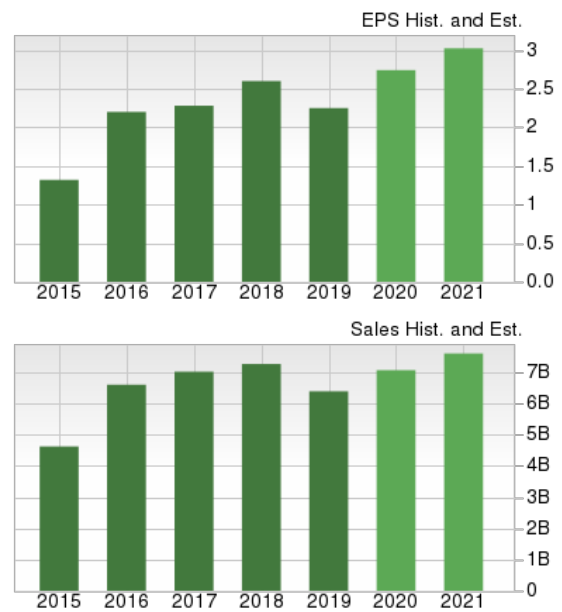
Activision creates and publishes games for consoles, desktops, mobile and tablet. Franchises under this segment include *Call of Duty*, *Crash* and *Spyro*. The segment generated revenues of \$2.22 billion and accounted for almost 37.2% of 2019 revenues.

Blizzard publishes games particularly for the PC format. It also maintains a proprietary online gaming service, Blizzard Battle.net, which facilitates digital distribution of Blizzard content and selected Activision content, online social connectivity, and the creation of user-generated content. The *Overwatch League* comes under this segment. The segment generated revenues of \$1.72 billion and accounted for 28.8% of revenues.

King operates as an independent unit. The segment generated revenues of \$2.03 billion and accounted for 34% of revenues.

The Other division includes Activision Blizzard Studios that makes original film and television content based on the company's huge IP library. The segment also consists Activision Blizzard Distribution business.

Activision faces stiff competition from the likes of Electronic Arts, Nintendo, Zynga and Tencent in the video gaming space.



Reasons To Buy:

- ▲ Activision popularity is primarily driven by its well-known franchises, which will continue to fuel top-line growth. *Call of Duty* is one of the biggest growth drivers for the company. The game has been the top-selling console franchise for Activision in 10 of the last 11 years. The latest title, *Call of Duty: Modern Warfare* has sold more units than *Call of Duty: Black Ops 4*. Activision stated that it will make frequent content updates to *Call of Duty* and expand the franchise's presence across platforms and geographies. *Call of Duty: Warzone* was launched on Mar 10, 2020 and the update has attracted more than 60 million players to date. *Call of Duty Mobile*, launched in October 2019, continues to play an important part in driving user base. The success of *World of Warcraft Classic* also indicates an expanding portfolio, which will benefit the company's top line in the long haul.
 - ▲ Compared with the physical platform, digital games are more profitable due to minimum packaging cost. This cost effectiveness will help publishers to use the digital format to keep a popular franchise running profitably over a longer period of time. Notably, Digital revenues contributed 76% of total revenues in 2019. Additionally, Activision has been trying to adopt an all year-round model instead of a launch-based model in which majority earnings and profits are derived in the first week to boost engagement. This bodes well for long-term performance.
 - ▲ King's dominance in the lucrative mobile gaming arena has improved Activision's prospects. Per Newzoo, by 2022, more than 50% of game market revenues will come from mobile games. Notably, King's *Candy Crush* remained the top-grossing franchise in U.S. app stores in 2019. Moreover, *Candy Crush Saga* was the top-grossing title in U.S. app stores in 2019, per data from App Annie, cited by Activision. King continues to emphasize on growing *Candy Crush's* reach and monetize the game by providing exciting in-game content. Solid growth in advertising net bookings, up 75% year over year in the first-quarter, despite coronavirus-led disruption on ad spending is very much encouraging. King's innovative pipeline of games is a key catalyst.
 - ▲ Activision Blizzard has long been eyeing the lucrative esports market. With continued increases in viewership, corporate sponsorships and growing media coverage, esports is here to stay. Newzoo expects the esports industry to generate revenues of \$1.8 billion by 2022. The company is ramping up investments in esports, live services and other tools to boost user engagement. In the first quarter of 2020, the *Call of Duty League* was launched with 12 city-based teams and YouTube as Activision's new broadcasting partner for esports leagues and events. Additionally, the *Overwatch League* successfully moved to online play and remote production during the second-quarter due to the coronavirus outbreak.
 - ▲ Activision's strong liquidity makes the stock attractive to investors. As of Mar 31, 2020, cash and cash equivalents were \$5.91 billion compared with \$5.79 billion as of Dec 31, 2019. Total debt of \$2.68 billion remained unchanged sequentially on Mar 31, 2020. Moreover, total debt-to-capital also declined from 17.3% in the fourth-quarter to 17% in first quarter of 2020. Further, Activision raised dividend payout by 11% compared to 2019-level, which reflects strong liquidity and solid free cash flow generation ability.
-

Activision's enviable IP, innovative gaming pipeline, strength in digital business and foray into esports bodes well for long-term growth.

Risks

- Video games are hit driven. Though Activision has a powerful line-up of games that can be repeatedly upgraded, there is no assurance that a particular game will be a hit. The video game business is highly cyclical and heavily dependent on time-to-time upgrade/introduction of new game software and hardware systems. Activision's costs are likely to shoot up in the near term as the company is trying to deliver popular franchises quickly than expected to aid top-line results.
 - Activision's dependence on handful of its franchises namely *Call of Duty*, *World of Warcraft*, *Overwatch* and King Digital's *Candy Crush* that make up more than 70% of its revenues remains a concern. Underperformance of any title is bound to negatively impact revenues. Moreover, Blizzard's revenues and monthly active users (MAUs) in 2019 decreased due to the lack of major game releases.
 - The video game publishing industry is intensely competitive. Activision faces stiff competition from the likes of Electronic Arts, Nintendo, Zynga and Tencent. The resultant pressure could tell on margins and also lead to market share losses. On the other hand, continued investment in the digital market may also hurt its profitability in the near term.
-

Last Earnings Report

Activision Q1 Earnings Decline Y/Y Despite MAU Growth

Activision Blizzard's first-quarter 2020 non-GAAP earnings of 76 cents per share declined 2.6% year over year.

Consolidated revenues dipped 4.9% year over year to \$1.74 billion. Adjusting for net effect from the recognition of deferred revenues, total revenues jumped 23.4% to \$1.47 billion.

The Zacks Consensus Estimate for earnings and revenues was pegged at 39 cents per share and \$1.32 billion, respectively.

For the quarter ended Mar 31, 2020, overall Monthly Active Users (MAUs) were 407 million compared with 345 million as of Mar 31, 2019.

Activision Blizzard's net bookings increased 21% year over year to \$1.52 billion. Net bookings from digital channels were \$1.36 billion, up 27.1% year over year.

Notably, in-game net bookings were \$956 million, up 20.4% year over year.

Quarter Ending 03/2020

Report Date	May 05, 2020
Sales Surprise	15.71%
EPS Surprise	48.72%
Quarterly EPS	0.58
Annual EPS (TTM)	2.51

Top-Line Details

Robust performance from *Call of Duty* and *World of Warcraft* drove first-quarter results. *Call of Duty* benefited from the launch of *Call of Duty: Warzone* on Mar 10, 2020. Solid demand for games amid coronavirus-led lockdowns and enforcement of shelter-at-home guidelines was witnessed in the reported quarter.

Segmentwise, product sales (31.3% of consolidated revenues) were \$543 million, down 17.2% year over year. Subscription, licensing and other revenues (71.8% of revenues) increased 6.5% to \$1.25 billion.

Based on distribution channels, Activision Blizzard reported retail channel sales of \$221 million, down 29.4% year over year. However, digital online revenues of \$1.44 billion were up 3.4% from the year-ago quarter. Other revenues improved 5.9% year over year to \$126 million.

Further, on the basis of platforms, revenues from mobile and ancillary (31.9% of consolidated revenues) rose 6.5% year over year to \$570 million. Additionally, PC and other revenues (28.7% of consolidated revenues) inched up 0.8% year over year to \$498 million. However, revenues from console (34.2% of consolidated revenues) decreased 12.3% year over year to \$594 million.

On a geographic basis, revenues from the Americas (54.6% of consolidated revenues) slipped 4% year over year to \$948 million. Europe, the Middle East and Africa (EMEA) revenues (32.6% of consolidated revenues) fell 7.8% year over year to \$566 million. However, revenues from the Asia Pacific (15.8% of consolidated revenues) jumped 22.9% year over year to \$274 million.

Segment Details

Activision (35.3% of segmental revenues) revenues surged 63.7% year over year to \$519 million. The division had 102 million MAUs as of Mar 31, 2020 compared with 41 million as of Mar 31, 2019.

Call of Duty: Warzone reached more than 60 million players to date. Further, *Call of Duty: Modern Warfare* in-game net bookings more than doubled year over year compared with *Black Ops 4*.

Call of Duty Mobile continued with its momentum in the quarter under review.

Blizzard (30.8% of segment revenues) revenues of \$452 million increased 31.4% from the year-ago quarter. Blizzard had 32 million MAUs as of Mar 31, 2020, unchanged year over year.

World of Warcraft's active player community continued to increase in the first quarter, driven by both new and returning players. Blizzard's key franchises experienced a month-over-month increase in MAUs in March as more and more people stayed at home during the period.

Moreover, *Hearthstone* engagement improved sequentially, driven by the new Battlegrounds game mode launched in November 2019. Further, *Overwatch* engagement increased meaningfully in March. Additionally, the *Overwatch League* successfully moved to online play and remote production during the quarter.

King's (33.9% of segment revenues) revenues of \$498 million declined 5.9% year over year. MAUs were 273 million as of Mar 31, 2020 compared with 272 million as of Mar 31, 2019.

Candy Crush franchise MAUs grew year over year in each month of the quarter with a double-digit spike recorded in March. *Candy Crush Saga* and the wider *Candy Crush* franchise were once again the top-grossing title and franchise in the U.S. mobile app stores.

Advertising net bookings soared 75% year over year in the first quarter.

Operating Details

Product development expense increased 0.4% year over year to \$230 million. Sales & marketing expenses were \$236 million, up 16.3% year over year.

However, general & administrative expenses decreased 4.7% year over year to \$142 million.

Total costs & expenses on a non-GAAP basis slid 0.4% year over year to \$1.08 billion in the reported quarter.

On a non-GAAP basis, operating income was \$711 million, down 4.4% year over year.

Balance Sheet & Cash Flow

As of Mar 31, 2020, cash and cash equivalents were \$5.91 billion compared with \$5.79 billion as of Dec 31, 2019.

Long term debt as of Mar 31, 2020 was \$2.68 billion, flat sequentially.

Operating cash flow plunged 67% year over year to \$148 million. Free cash flow fell 70% year over year to \$129 million.

On a trailing-12 month (TTM) basis, free cash flow declined 11% to \$1.41 billion.

Activision Blizzard declared a cash dividend of 41 cents per share, payable May 6, 2020 to its shareholders of record as of Apr 15. The payout represents an 11% hike from the 2019-level.

Guidance

For second-quarter 2020, Activision Blizzard expects non-GAAP revenues of \$1.69 billion and earnings of 64 cents per share. Net bookings are expected to be \$1.68 billion.

For 2020, Activision Blizzard anticipates non-GAAP revenues of \$6.80 billion and earnings of \$2.62 per share. Net bookings are expected to be \$6.9 billion. Appreciation of the U.S. dollar is expected to hurt full-year net bookings by \$100 million.

Moreover, strengthening of the U.S. dollar and lower interest income are expected to affect 2020 earnings by 8 cents.

Note: The EPS data mentioned in the text of this section differs from the rest of report due to the difference in calculation or consideration of one-time items.

Recent News

On May 12, Activision Blizzard announced that *Tony Hawk's Pro Skater 1 and 2* remastered will be available on Sep 4, 2020 for PlayStation 4 & 4 Pro, the family of Xbox One devices from Microsoft, including the Xbox One X, as well as on PC through the Epic platform.

On May 7, *The Overwatch League* and *Call of Duty League*, two Activision Blizzard operated esports leagues, and Sportradar announced an agreement for a comprehensive integrity program to protect both leagues from betting-related corruption.

On Mar 31, Activision announced the availability of *Call of Duty: Modern Warfare 2 Campaign Remastered* on PlayStation 4.

On Mar 17, Activision unveiled the new free-to-play Demon Hunter class for Blizzard's *Hearthstone* game alongside *Ashes of Outland* expansion pack to be released on Apr 7.

On Mar 10, Activision announced the release of free-to-play and free-for-everyone, *Call of Duty: Warzone* available worldwide on PS4, Xbox One, and PC.

On Feb 11, Activision announced *Call of Duty: Modern Warfare* Season Two content. Throughout Season Two, players across all platforms can continue the fight alongside their favorite operators in all new and returning fan-favorite maps, fresh in-game challenges and rewards, limited-time game modes, and playlists among the community celebrations.

Valuation

Activision shares are up 17.6% in the year-to-date period and 57% over the trailing 12-month period. Stocks in the Zacks sub-industry are up 6.6%, while the same in the Zacks Consumer Discretionary sector is down 9.9%, in the year-to-date period. Over the past year, the Zacks sub-industry is up 23.2%, while the sector is down 1.4%.

The S&P 500 index is down 4.4% in the year-to-date period but up 9.1% in the past year.

The stock is currently trading at 24.44X trailing 12-month earnings, which compares to 29.43X for the Zacks sub-industry, 31.27X for the Zacks sector and 22.3X for the S&P 500 index.

Over the past five years, the stock has traded as high as 31.09X and as low as 16.88X, with a 5-year median of 23.91X. Our Outperform recommendation indicates that the stock will perform better than the market. Our \$80 price target reflects 28.11X trailing 12-month earnings.

The table below shows summary valuation data for ATVI

Valuation Multiples - ATVI					
		Stock	Sub-Industry	Sector	S&P 500
P/E F12M	Current	24.44	29.43	31.27	22.3
	5-Year High	31.09	30.46	31.27	22.3
	5-Year Low	16.88	19.51	16.21	15.23
	5-Year Median	23.91	25.27	19.91	17.49
P/S F12M	Current	7.39	5.43	2.18	3.47
	5-Year High	8.07	5.98	3.19	3.47
	5-Year Low	3.46	3.46	1.67	2.53
	5-Year Median	5.47	4.71	2.52	3.02
P/B TTM	Current	4.14	4.2	2.91	4.21
	5-Year High	6.25	6.55	5.05	4.56
	5-Year Low	2.25	3.06	2.20	2.83
	5-Year Median	3.54	4.05	4.22	3.66

As of 06/03/2020

Industry Analysis Zacks Industry Rank: Top 4% (11 out of 253)



Top Peers

Company (Ticker)	Rec	Rank
Nintendo Co. (NTDOY)	Outperform	2
Electronic Arts Inc. (EA)	Neutral	2
Glu Mobile Inc. (GLUU)	Neutral	2
Hasbro, Inc. (HAS)	Neutral	3
JAKKS Pacific, Inc. (JAKK)	Neutral	3
Mattel, Inc. (MAT)	Neutral	3
TakeTwo Interactive Software, Inc. (TTWO)	Neutral	1
Zynga Inc. (ZNGA)	Neutral	3

Industry Comparison Industry: Toys - Games - Hobbies				Industry Peers		
	ATVI	X Industry	S&P 500	EA	HAS	MAT
Zacks Recommendation (Long Term)	Outperform	-	-	Neutral	Neutral	Neutral
Zacks Rank (Short Term)	1	-	-	2	3	3
VGM Score	F	-	-	D	B	F
Market Cap	53.87 B	7.06 B	22.50 B	34.16 B	10.58 B	3.54 B
# of Analysts	14	6.5	14	13	7	4
Dividend Yield	0.59%	0.00%	1.88%	0.00%	3.52%	0.00%
Value Score	D	-	-	D	B	D
Cash/Price	0.11	0.16	0.06	0.16	0.12	0.16
EV/EBITDA	23.45	17.52	12.98	17.38	15.06	20.50
PEG Ratio	2.52	1.89	3.05	3.25	1.57	NA
Price/Book (P/B)	4.14	4.36	3.11	4.58	3.83	22.41
Price/Cash Flow (P/CF)	24.91	22.44	12.18	21.97	12.32	25.59
P/E (F1)	25.52	24.59	22.19	23.67	21.56	NA
Price/Sales (P/S)	8.35	3.97	2.40	6.17	2.08	0.80
Earnings Yield	3.92%	3.74%	4.31%	4.22%	4.64%	-2.94%
Debt/Equity	0.21	0.12	0.76	0.05	1.87	18.04
Cash Flow (\$/share)	2.81	1.99	7.01	5.37	6.27	0.40
Growth Score	F	-	-	D	B	F
Hist. EPS Growth (3-5 yrs)	13.15%	14.13%	10.87%	15.11%	4.60%	-42.20%
Proj. EPS Growth (F1/F0)	21.84%	24.61%	-10.74%	-12.91%	-12.25%	0.00%
Curr. Cash Flow Growth	-23.97%	-3.32%	5.48%	15.43%	-3.32%	-214.17%
Hist. Cash Flow Growth (3-5 yrs)	9.90%	6.23%	8.55%	7.26%	5.21%	-28.91%
Current Ratio	2.78	1.99	1.29	2.45	1.91	1.60
Debt/Capital	17.04%	15.95%	44.75%	5.05%	65.21%	94.75%
Net Margin	24.21%	10.71%	10.59%	54.88%	8.33%	-5.62%
Return on Equity	14.57%	15.68%	16.29%	16.79%	24.71%	-39.51%
Sales/Assets	0.35	0.72	0.55	0.52	0.68	0.85
Proj. Sales Growth (F1/F0)	10.60%	6.36%	-2.65%	6.36%	21.89%	-6.81%
Momentum Score	B	-	-	D	B	D
Daily Price Chg	-4.19%	0.00%	2.42%	-3.62%	5.28%	5.81%
1 Week Price Chg	-1.51%	0.00%	4.60%	2.55%	10.23%	8.61%
4 Week Price Chg	-4.05%	5.85%	13.40%	2.26%	17.15%	20.14%
12 Week Price Chg	17.85%	21.28%	12.78%	16.56%	22.56%	13.97%
52 Week Price Chg	57.05%	15.10%	0.89%	23.81%	-25.41%	-7.19%
20 Day Average Volume	7,771,710	364,049	2,528,787	3,140,285	1,021,304	4,603,321
(F1) EPS Est 1 week change	0.00%	0.00%	0.00%	0.35%	0.00%	0.00%
(F1) EPS Est 4 week change	9.64%	-0.36%	-0.14%	-1.30%	-5.18%	-172.73%
(F1) EPS Est 12 week change	10.18%	-0.03%	-16.00%	-1.52%	-14.79%	-568.75%
(Q1) EPS Est Mthly Chg	95.14%	48.00%	-0.02%	661.84%	0.86%	-26.28%

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.

Value Score	D
Growth Score	F
Momentum Score	B
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.

Disclosures

This report contains independent commentary to be used for informational purposes only. The analysts contributing to this report do not hold any shares of this stock. The analysts contributing to this report do not serve on the board of the company that issued this stock. The EPS and revenue forecasts are the Zacks Consensus estimates, unless indicated otherwise on the reports first page. Additionally, the analysts contributing to this report certify that the views expressed herein accurately reflect the analysts personal views as to the subject securities and issuers. ZIR certifies that no part of the analysts compensation was, is, or will be, directly or indirectly, related to the specific recommendation or views expressed by the analyst in the report.

Additional information on the securities mentioned in this report is available upon request. This report is based on data obtained from sources we believe to be reliable, but is not guaranteed as to accuracy and does not purport to be complete. Any opinions expressed herein are subject to change.

ZIR is not an investment advisor and the report should not be construed as advice designed to meet the particular investment needs of any investor. Prior to making any investment decision, you are advised to consult with your broker, investment advisor, or other appropriate tax or financial professional to determine the suitability of any investment. This report and others like it are published regularly and not in response to episodic market activity or events affecting the securities industry.

This report is not to be construed as an offer or the solicitation of an offer to buy or sell the securities herein mentioned. ZIR or its officers, employees or customers may have a position long or short in the securities mentioned and buy or sell the securities from time to time. ZIR is not a broker-dealer. ZIR may enter into arms-length agreements with broker-dealers to provide this research to their clients. Zacks and its staff are not involved in investment banking activities for the stock issuer covered in this report.

ZIR uses the following rating system for the securities it covers. **Outperform-** ZIR expects that the subject company will outperform the broader U.S. equities markets over the next six to twelve months. **Neutral-** ZIR expects that the company will perform in line with the broader U.S. equities markets over the next six to twelve months. **Underperform-** ZIR expects the company will underperform the broader U.S. equities markets over the next six to twelve months.

No part of this report can be reprinted, republished or transmitted electronically without the prior written authorization of ZIR.