

Akamai Technologies (AKAM)

\$102.45 (As of 11/17/20)

Price Target (6-12 Months): **\$108.00**

Long Term: 6-12 Months

Zacks Recommendation:

Neutral

(Since: 04/16/19)

Prior Recommendation: Outperform

Short Term: 1-3 Months

Zacks Rank: (1-5)

3-Hold

Zacks Style Scores:

VGM:B

Value: B

Growth: B

Momentum: D

Summary

Akamai is well-positioned to benefit from growth in Internet traffic and increasing demand for cloud security solutions. Rising instances of cyberattacks is boosting demand for the company's application-layer firewall and bot management services. Consistent momentum in adoption of Bot Manager service, Secure Web Gateway, Page Integrity Manager and Enterprise Defender are expected to drive the top line, going ahead. Akamai also raised guidance for 2020. However, management expects ban of 59 China-based apps in India to stay put for remainder of 2020 and anticipates the proposed ban (if put into action) on those apps in U.S. commencing from mid-November to have a negative impact on the fourth quarter revenues. Also, increasing bandwidth costs remain a major concern. Akamai's shares have underperformed the industry on a year-to-date basis.

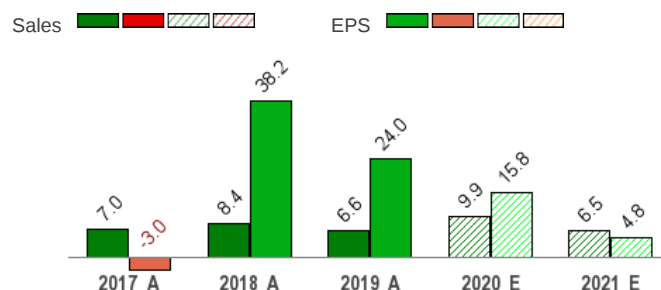
Price, Consensus & Surprise



Data Overview

52-Week High-Low	\$120.00 - \$75.18
20-Day Average Volume (Shares)	2,088,583
Market Cap	\$16.7 B
Year-To-Date Price Change	18.6%
Beta	0.47
Dividend / Dividend Yield	\$0.00 / 0.0%
Industry	Internet - Services
Zacks Industry Rank	Bottom 22% (197 out of 254)

Sales and EPS Growth Rates (Y/Y %)



Last EPS Surprise	6.5%
Last Sales Surprise	2.2%
EPS F1 Estimate 4-Week Change	3.1%
Expected Report Date	02/09/2021
Earnings ESP	0.3%
P/E TTM	20.0
P/E F1	19.7
PEG F1	1.6
P/S TTM	5.3

Sales Estimates (millions of \$)

	Q1	Q2	Q3	Q4	Annual*
2021	814 E	833 E	850 E	886 E	3,388 E
2020	764 A	795 A	793 A	828 E	3,180 E
2019	707 A	705 A	710 A	772 A	2,894 A

EPS Estimates

	Q1	Q2	Q3	Q4	Annual*
2021	\$1.28 E	\$1.34 E	\$1.38 E	\$1.43 E	\$5.45 E
2020	\$1.20 A	\$1.38 A	\$1.31 A	\$1.31 E	\$5.20 E
2019	\$1.10 A	\$1.07 A	\$1.10 A	\$1.23 A	\$4.49 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 11/17/2020. The reports text is as of 11/18/2020.

Overview

Headquartered in Cambridge, MA, Akamai Technologies Inc. is a global provider of content delivery network (CDN) and cloud infrastructure services.

The company's solutions accelerate and improve the delivery of content over the Internet, enabling faster response to requests for web pages, streaming of video & audio, business applications, etc. Its offerings are intended to reduce the impact of traffic congestion, bandwidth constraints and capacity limitations on customers.

Moreover, Akamai's solutions allow customers to operate their web transactions anywhere anytime with cost-effective outsourced infrastructure and carry out predictable, scalable and secure e-business at low cost.

These solutions are built on the Akamai Intelligent Edge Platform, which is the technological platform for its business solutions and hosts some of the world's best-known Internet brand names.

The company's cloud optimization solutions help organizations to improve performance, increase availability and enhance the security of applications and key web assets delivered from data-centers to the end user.

Akamai's platform comprises more than 250,000 servers located in over 1,500 networks around the world.

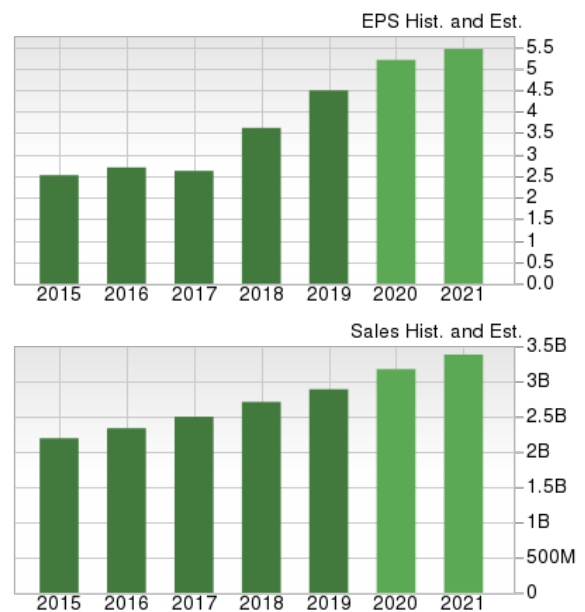
Akamai reported revenues of \$2.894 billion in 2019.

The company has reorganized its business into two main divisions - Media and Carrier (45.9% of total revenue in 2019) and Web Division (54.1%).

Notably, this marks a shift from the earlier product-focused structure to a new customer-focused one, which reports revenues derived from customers that are managed by the division.

Akamai markets and sells its services and solutions both domestically and internationally through direct sales and more than 100 active channel partners, including AT&T, Orange Business Services, IBM, Deutsche Telecom and Telefonica Group.

In 2019, the company derived 58.5% of its revenues from the U.S., while the remaining 41.5% came from its foreign operations.



Source: Zacks Investment Research

Reasons To Buy:

- ▲ Akamai is a leading provider of content delivery network (CDN) services as its platform handles approximately two trillion web interactions on a daily basis. Its solutions help customers to address the challenges of bandwidth constraints and Internet traffic, and at the same time reduce the need for additional hardware to manage traffic loads. Software distribution plays an important role in bolstering the business as the company benefits from rapid growth in Internet-based distribution of applications, operating system software and online game software. We believe that strong growth in demand for online media and entertainment (High Definition video) over the Internet will drive bandwidth requirements, thereby accelerating demand for the company's solutions going forward.
- ▲ We believe that the increasing adoption of cloud computing technologies will be a major growth driver for Akamai, going forward. The company's cloud optimization solutions help organizations to improve performance, increase availability and enhance the security of applications and key web assets delivered from data-centers to the end user. Since a large portion of the revenues is recurring in nature, the company is expected to boost its sales force as well as investments by developing new products to achieve its long-term annual revenue target of \$5 billion.
- ▲ Cyber security is an area that holds a lot of promise in our view. With rapid adoption of cloud computing, security has become a major concern for enterprises. Hackers are using new and sophisticated techniques to take advantage of the security loopholes of the cloud. Large enterprises are expected to increase their security budgets to efficiently address security concerns and instill confidence in cloud computing. We believe that growing demand for Akamai's security solutions will translate into significant growth opportunities over the long term. In 2019, Cloud Security solutions sales increased 30% year over year (adjusted for foreign exchange) to \$849 million. Moreover, Cloud Security solutions increased 23% year over year (adjusted for foreign exchange) to \$265.9 million in third-quarter 2020. Recently, the company acquired Asavie to boost its security offerings. Asavie specializes in Internet of Things (IoT), mobile and security solutions. The acquisition is expected to help Akamai add more subscribers to its Edge platform. The company's security offerings are poised to gain from higher demand for data computing at the edge, triggered by rapid deployment of 5G and IoT devices proliferation.
- ▲ Akamai is well positioned to gain from the huge growth of mobile data traffic driven by increasing adoption of mobile data/apps. According to the latest report from Report Linker, global mobile data traffic is expected to witness a compounded annual growth rate (CAGR) of 25.7% between 2020 and 2027, reaching 171.3 terabytes per month by 2027. Given this aggressive growth, mobile networks are likely to face significant congestion and will thus require technological advancements from content delivery networks. We believe that the company has significant growth opportunities in the mobile segment, based on its strong and innovative product portfolio. Furthermore, major events like the Olympics are expected to boost the demand for online media, thereby accelerating demand for the company's solutions going forward. Moreover, accelerated deployment of 5G is expected to act as a tailwind over the longer haul.
- ▲ Akamai exited the quarter ending Sep 30, 2020, with cash and cash equivalents of \$742.5 million, up from \$572.3 million, as of Jul 30, 2020. Moreover, Akamai generated cash flow from operations of \$402 million in the third quarter, up 34.6% sequentially. The strong cash flow generation reflects that the company is making investments in the right direction and is expected to help it sustain share repurchases and other growth investments, at least in the near term. In the third quarter, Akamai repurchased around 0.1 million shares for \$13 million. Notably, lower number of outstanding shares helps the bottom line. The company has approximately \$644 million remaining in its previously-announced share repurchase authorization.

Increasing demand for cloud infrastructure solutions, security, mobile products and online video amid growing data traffic are favoring the company's growth prospects.

Reasons To Sell:

- ▼ Akamai is facing increasing competition and pricing pressure as new competitors and non-traditional players like Amazon, Netflix, Verizon and Comcast enter the market, joining traditional players like Limelight Network and Packeteer. Also, Amazon Web Services has been consistently gaining traction and can pose serious challenges for Akamai's business. Moreover, Amazon's entry into the digital audio, video streaming and cloud computing lines of business is an added risk. Furthermore, Akamai has traditionally charged a higher premium compared to what its competitors like Limelight, EdgeCast (acquired by Verizon) and Level3 (acquired by CenturyLink) charge for content delivery. However, the company is becoming more aggressive in terms of pricing, especially in case of video content, to attract more customers and traffic to its network. We believe this aggressive pricing will hurt profitability in the quarters ahead.
- ▼ Akamai's business is also being hurt by the Do it yourself (DIY) initiatives of some key clients in the CDN space. Notably, some big players like Netflix and Apple have developed their own CDN. This allows companies to reduce their dependence on providers like Akamai. Loss of similar large customers is expected to have a negative impact on the company's top line.
- ▼ Growth in the mobile Internet market has created a period of uncertainty. Mobile traffic growth is both a result of higher Internet usage as well as the shift of some traffic from wireline to wireless networks. This shift in data usage could hurt Akamai's wireline CDN business if the company is unable to quickly adapt to the change. Greater flexibility in managing data traffic could also prompt wireless service providers to incorporate their own CDN-like technologies, resulting in fresh competition for the company.
- ▼ Increasing total bandwidth costs remain a headwind for Akamai. The company believes that bandwidth costs will continue to increase as a result of expected rise in traffic levels, somewhat offset by anticipated reductions in bandwidth costs per unit. This is expected to hurt margins at least in the near term.

Akamai's business is being hurt by the DIY initiatives of some key clients in the CDN space amid increasing total band width costs.

Last Earnings Report

Akamai's Q3 Earnings and Revenues Top Estimates

Akamai Technologies reported third-quarter 2020 adjusted earnings of \$1.31 per share that beat the Zacks Consensus Estimate by 6.5%. The figure surged 19.1% year over year (up 18% after adjusting for forex).

The year-over-year growth in earnings can be attributed to continued increase in revenues owing to strong demand for Cloud Security Solutions, and high traffic levels as more enterprises moved their operations online due to the coronavirus outbreak and operational efficiency.

Revenues of \$792.9 million outpaced the Zacks Consensus Estimate by 2.2% and increased 11.7% year over year (up 11% after adjusting for forex).

Excluding Internet Platform Customers, revenues rose 11.5% year over year (up 11% after adjusting for forex) to \$742.2 million. Revenues from Internet Platform Customers were \$50.6 million, up 14.6% year over year.

U.S. revenues were \$437.4 million, up 5.9% year over year. International revenues were \$355.5 million, up 19.8% year over year (up 18% after adjusting for forex).

Continued Strength in Cloud Security Solutions

Cloud Security Solutions revenues were \$265.9 million, up 23.1% year over year (up 23% after adjusting for forex).

Amid increased DDoS attacks, Akamai clinched several security deals from banks, insurance companies and travel websites for its Prolexic services. Management added that Bot Manager services thwarted double the number of malicious logins efforts in the third quarter compared with second-quarter levels.

Akamai blocked more than 53 billion credential abuse attempts in the second quarter of 2020. The increased instances of cyber-attacks are driving adoption of Bot Manager service, which is currently used by more than 600 of the world's major enterprises.

Also, management stated that Page Integrity Manager security solution is seeing incremental adoption. The purpose of the solution is to protect websites and end users from malware-infected content that resides on third-party sites.

Further, to boost revenues from Cloud Security solutions, Akamai announced the acquisition of Asavie in an all cash deal. A privately-funded company, Asavie specializes in Internet of Things (IoT), mobile and security solutions. Asavie will be integrated with Akamai's Security and Personalization Services ("SPS") product portfolio.

Asavie's software solutions help mobile operators to offer organizations better connectivity and improved secure communication between mobile phones and various IoT devices. It also eliminates the need for installing client software on the device.

The acquisition is expected to help Akamai add more subscribers to its Edge platform. The company's security offerings are poised to gain from higher demand for data computing at the edge, triggered by rapid deployment of 5G and IoT devices proliferation.

Revenues from CDN and other solutions of \$527 million increased 6.7% on a year-over-year basis year (up 6% after adjusting for forex).

Segment Details

Web Division revenues increased 7.8% year over year (up 7% after adjusting for forex) to \$418.1 million, owing to strong growth in the security business.

Media and Carrier Division revenues of \$374.8 million rose 16.3% (up 16% after adjusting for forex) year over year. The segment's top line was driven by higher traffic video streaming and gaming software downloads.

Per Akamai, increased traffic at one of its largest video-on-demand service customer boosted traffic on Akamai's platform by a factor of four. Akamai supports more than 220 of the world's largest OTT and broadcasting companies as well as with 24 of the world's 25 most popular video game publishers. Year to date, Akamai had received more than 100 trillion API requests for the Edge Platform.

Operating Details

Non-GAAP cash gross margin contracted 200 basis points (bps) on a year-over-year basis to 76%.

Adjusted EBITDA margin of 44% expanded 200 bps on a year-over-year basis.

Cash operating expenses as a percentage of revenues contracted 340 bps from the year-ago quarter's levels to 31.8%.

Non-GAAP operating margin expanded 300 bps on a year-over-year basis to 32% higher than management's expectation of 30%.

The company expects to exceed its goal of operating margins of 30% for 2020 owing to impressive financial performance so far in the year.

Balance Sheet & Cash Flow

Quarter Ending	09/2020
Report Date	Oct 27, 2020
Sales Surprise	2.19%
EPS Surprise	6.50%
Quarterly EPS	1.31
Annual EPS (TTM)	5.12

As of Sep 30, Akamai's cash and cash equivalents and marketable securities were \$1.44 billion compared with \$1.37 billion as of Jun 30, 2020.

The company generated cash flow from operations of \$402 million, up 34.6% sequentially and 35.2% year over year.

Guidance

For fourth-quarter 2020, Akamai expects revenues between \$812 million and \$837 million, suggesting 4-8% year over year growth in constant currency.

Revenues are expected to be negatively impacted due the assumption of ban on 59 China-based apps in India (Akamai delivers traffic for nearly 30 of those) to remain in place for remainder of 2020. Also, management noted that U.S. is planning a similar ban for those 59 Chinese apps commencing from mid-November, which might dent the top line by \$4-\$5 million, in the fourth quarter, on a sequential basis.

However, the acquisition of Asavie is expected to contribute \$4 million to the fourth quarter top line. Notably, forex is expected to have a \$2-million positive impact on a sequential basis.

Cash gross margin is expected to be approximately 76% in the fourth quarter. Non-GAAP operating expenses are projected between \$268 million and \$279 million, suggesting improvement on a sequential basis. EBITDA margin is expected to be nearly 43%.

Akamai expects non-GAAP operating margin of roughly 30% for the fourth quarter.

Non-GAAP earnings are envisioned in the range of \$1.28-\$1.32 per share, which indicates 2-5% growth in constant currency.

Akamai revised 2020 guidance. The company currently expects revenues between \$3.164 billion and \$3.189 billion as compared with the previous range of \$3.125 billion to \$3.175 billion.

Non-GAAP operating margin is expected to be 31% compared with earlier range of 30-31%.

Non-GAAP earnings are expected between \$5.16 and \$5.20 per share, indicating year-over-year growth of 15-16%. Earlier, Akamai expected earnings in the range of \$5.02-\$5.12 per share.

Recent News

On Oct 27, Akamai announced the buyout of Asavie in an all cash deal. Asavie's offerings will be integrated with Akamai's Security and Personalization Services ("SPS") product portfolio.

On Oct 21, Akamai was designated as a leader in Gartner's 2020 Magic Quadrant for Web Application Firewalls for the fourth successive year.

On Sep 24, Akamai was recognized as a leader in research firm Forrester's The Forrester Wave: Zero Trust eXtended Ecosystem Platform Providers, Q3 2020 evaluation. The company was the highest scorer in the area of network and workload security along with ZTX advocacy and market approach.

On Sep 22, Akamai extended business relationship with AT&T through 2023. Per the renewed agreement terms, continued access to Akamai services will be provided to AT&T business customers.

On May 26, Akamai rolled out a new threat detection solution — Page Integrity Manager — to prevent data breaches amid the growing cyber security attacks and enhance user experience.

Valuation

Akamai shares are up 17.7% in the year-to-date period and 14.9% over the trailing 12-month period. Stocks in the Zacks sub-industry and the Zacks Computer & Technology sector are up 32.9% and 31.6% in the year-to-date period, respectively. Over the past year, the Zacks sub-industry and sector are up 35% and 36.3%, respectively.

The S&P 500 index is up 12.9% in the year-to-date period and 16.7% in the past year.

The stock is currently trading at 18.75X forward 12-month earnings compared with 30.37X for the Zacks sub-industry, 27.15X for the Zacks sector and 22.78X for the S&P 500 index.

Over the past five years, the stock has traded as high as 36.43X and as low as 17.93X, with a five-year median of 24.81X. Our Neutral recommendation indicates that the stock will perform in line with the market. Our \$108 price target reflects 19.77X forward 12-month earnings.

The table below shows summary valuation data for AKAM

Valuation Multiples - AKAM					
		Stock	Sub-Industry	Sector	S&P 500
P/E F12M	Current	18.75	30.37	27.15	22.78
	5-Year High	36.43	43.63	28.01	23.47
	5-Year Low	17.93	22.21	16.95	15.27
	5-Year Median	24.81	32.57	19.94	17.72
P/S F12M	Current	4.92	6.9	4.3	4.25
	5-Year High	5.9	14.87	4.48	4.3
	5-Year Low	2.89	5.12	2.77	3.17
	5-Year Median	4.28	7.76	3.44	3.67
EV/Sales TTM	Current	4.83	8	5.06	4.23
	5-Year High	5.93	13.67	5.23	4.23
	5-Year Low	2.77	4.36	2.85	2.62
	5-Year Median	4.26	7.94	3.85	3.58

As of 11/17/2020

Source: Zacks Investment Research

Industry Analysis Zacks Industry Rank: Bottom 22% (197 out of 254)



Source: Zacks Investment Research

Top Peers

Company (Ticker)	Rec	Rank
Cisco Systems, Inc. (CSCO)	Neutral	3
Citrix Systems, Inc. (CTXS)	Neutral	3
F5 Networks, Inc. (FFIV)	Neutral	3
Fastly, Inc. (FSLY)	Neutral	4
VMware, Inc. (VMW)	Neutral	3
Juniper Networks, Inc. (JNPR)	Underperform	5
NetScout Systems, Inc. (NTCT)	Underperform	5
Palo Alto Networks, Inc. (PANW)	Underperform	3

The positions listed should not be deemed a recommendation to buy, hold or sell.

Industry Comparison Industry: Internet - Services				Industry Peers		
	AKAM	X Industry	S&P 500	CSCO	FSLY	JNPR
Zacks Recommendation (Long Term)	Neutral	-	-	Neutral	Neutral	Underperform
Zacks Rank (Short Term)	3	-	-	3	4	5
VGM Score	B	-	-	C	C	C
Market Cap	16.68 B	751.63 M	26.21 B	176.78 B	8.02 B	7.32 B
# of Analysts	11	3	14	11	8	8
Dividend Yield	0.00%	0.00%	1.5%	3.44%	0.00%	3.60%
Value Score	B	-	-	B	F	B
Cash/Price	0.09	0.15	0.06	0.17	0.06	0.26
EV/EBITDA	16.03	1.57	14.53	9.55	-269.84	11.52
PEG F1	1.60	2.04	2.80	1.99	NA	3.23
P/B	4.06	3.60	3.60	4.63	14.91	1.61
P/CF	15.29	16.91	13.74	12.47	NA	11.75
P/E F1	19.70	34.56	22.02	13.24	NA	14.39
P/S TTM	5.34	3.10	2.85	3.68	30.02	1.65
Earnings Yield	5.08%	0.27%	4.32%	7.55%	-0.23%	6.93%
Debt/Equity	0.46	0.12	0.70	0.25	0.05	0.38
Cash Flow (\$/share)	6.70	0.03	6.92	3.36	-0.32	1.89
Growth Score	B	-	-	C	A	D
Historical EPS Growth (3-5 Years)	17.91%	16.39%	9.79%	9.07%	NA	-8.98%
Projected EPS Growth (F1/F0)	15.77%	10.70%	0.36%	-1.45%	65.38%	-10.24%
Current Cash Flow Growth	14.74%	-2.71%	5.39%	-2.66%	65.65%	-8.77%
Historical Cash Flow Growth (3-5 Years)	12.26%	19.91%	8.31%	2.34%	NA	-15.41%
Current Ratio	3.13	1.83	1.38	1.59	7.97	2.02
Debt/Capital	31.51%	12.62%	41.97%	20.04%	4.63%	27.32%
Net Margin	18.01%	-6.71%	10.41%	21.76%	-24.07%	8.92%
Return on Equity	17.69%	-0.67%	15.05%	32.64%	-14.37%	8.30%
Sales/Assets	0.44	0.57	0.50	0.52	0.57	0.51
Projected Sales Growth (F1/F0)	9.89%	1.30%	0.16%	-1.09%	44.84%	-0.66%
Momentum Score	D	-	-	C	D	B
Daily Price Change	0.76%	0.00%	-0.35%	-1.55%	3.49%	-0.58%
1-Week Price Change	-0.10%	0.00%	4.23%	10.31%	5.83%	6.12%
4-Week Price Change	-6.27%	0.00%	6.91%	6.84%	-6.10%	1.23%
12-Week Price Change	-7.70%	0.44%	9.73%	-0.19%	-13.33%	-6.84%
52-Week Price Change	15.75%	22.11%	6.44%	-7.90%	268.61%	-14.97%
20-Day Average Volume (Shares)	2,088,583	70,060	2,205,801	29,025,900	10,117,575	3,893,204
EPS F1 Estimate 1-Week Change	0.00%	0.00%	0.00%	1.86%	0.00%	0.00%
EPS F1 Estimate 4-Week Change	3.10%	0.00%	1.73%	1.78%	-16.06%	-7.28%
EPS F1 Estimate 12-Week Change	3.07%	3.16%	3.56%	1.78%	-23.72%	-8.26%
EPS Q1 Estimate Monthly Change	0.69%	0.00%	0.58%	2.06%	-46.43%	-3.23%

Source: Zacks Investment Research

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 maintain a 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	B
Growth Score	B
Momentum Score	D
VGM Score	B

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.

Additional Disclosure

This material represents an assessment of the market and economic environment at a specific point in time and is not intended to be a forecast of future events, or a guarantee of future results. Forward-looking statements are subject to certain risks and uncertainties. Any statements that refer to expectations, projections or characterizations of future events or circumstances, including any underlying assumptions, are forward-looking statements. Actual results, performance, or achievements may differ materially from those expressed or implied.

Returns quoted represent past performance which is no guarantee of future results. Investment returns and principal value will fluctuate so that when shares are redeemed, they may be worth more or less than their original cost. Current performance may be higher or lower than the performance shown.

Investing involves risk; principal loss is possible. There is no guarantee that companies that can issue dividends will declare, continue to pay or increase dividends.

Glossary of Terms and Definitions

52-Week High-Low: The range of the highest and lowest prices at which a stock has traded during the past year. This range is determined based on the stock's daily closing price which may differ from the intra-day high or low. Many investors use it as a technical indicator to determine a stock's current value and future price movement. The idea here is that if price breaks out from the 52-week range, in either direction, the momentum may continue in the same direction.

20-Day Average Volume (Shares): The average number of shares of a company traded in a day over the last 20 days. It is a direct indication of a security's overall liquidity. The higher the average daily trading volume, the easier it is to enter or exit the stock at a desired price with more buyers and sellers being available.

Daily Price Change: This is the percentage difference between a trading day's closing price and the prior trading day's closing price. This item is updated at 9 p.m. EST each day.

1-Week Price Change: This is the percentage change in a stock's closing price over the last 5 trading days. This change reflects the collective buying and selling sentiment over the 1-week period.

A strong weekly price increase for the stock, especially when accompanied by increased volume, is an indication of it gaining momentum.

4-Week Price Change: This is the percentage change in a stock's closing price over the last 20 trading days or past 4 weeks. This is a medium-term price change metric and an indication of the stock gaining momentum.

12-Week Price Change: This is the percentage change of a stock's closing price over the last 60 trading days or past 12 weeks. Similar to 4-week price change, this is a medium-term price change metric. It shows whether a stock has been enjoying strong investor demand, or if it has been in consolidation, or distress over this period.

52-Week Price Change: This is the percentage change in a stock's closing price over the last 260 trading days or past 52 weeks. This long-term price change metric is a good reference point for investors. Some investors seek stocks with the best percentage price change over the last 52 weeks, expecting the momentum to continue.

Market Cap: The number of outstanding common shares of a company times its latest price per share. This figure represents a company's size, which indicates various characteristics, including price stability and risk, in which investors could be interested.

Year-To-Date Price Change: Change in a stock's daily closing price in the period of time beginning the first day of the current calendar year through to the previous trading day.

of Analysts: Number of EPS estimates used in calculating the current-quarter consensus. These estimates come from the brokerage analysts tracking this stock. However, the number of such analysts tracking this stock may not match the number of estimates, as all brokerage analysts may not come up with an estimate or provide it to us.

Beta: A measure of risk commonly used to compare the volatility of a stock to the overall market. The S&P 500 Index is the base for calculating beta and carries a value of 1. A stock with beta below 1 is less risky than the market as a whole. And a stock with beta above 1 is riskier.

Dividend: The portion of earnings a company is expected to distribute to its common shareholders in the next 12 months for each share they own. Dividends are usually paid quarterly. Dividend payments reflect positively on a company and help maintain investors' trust. Investors typically find dividend-paying stocks appealing because the dividend adds to any market price appreciation to result in higher return on investment (ROI). Moreover, a steady or increasing dividend payment provides investors a cushion in a down market.

Dividend Yield: The ratio of a company's annual dividend to its share price. The annual dividend used in the ratio is calculated based on the most recent dividend paid by the company. Dividend yield is an estimate of the dividend-only return from a stock in the next 12 months. Since dividend itself doesn't change frequently, dividend yield usually changes with a stock's price movement. As a result, often an unusually high dividend yield is a result of weak stock price.

S&P 500 Index: The Standard & Poor's 500 (S&P 500) Index is an unmanaged group of securities considered to be representative of the stock market in general. It is a market-capitalization-weighted index of stocks of the 500 largest U.S. companies. Each stock's weight in the index is proportionate to its market value.

Industry: One of the 250+ groups that Zacks classifies all stocks into based on the nature of business. These groups are termed as expanded (aka "X") industries and map to their respective (economic) sectors; Zacks has 16 sectors.

Zacks Industry Rank: The Zacks Industry Rank is determined by calculating the average Zacks Rank for all stocks in the industry and then assigning an ordinal rank to it. For example, an industry with an average Zacks Rank of 1.6 is better than an industry with an average Zacks Rank of 2.3. So, the industry with the better average Zacks Rank would get a better Zacks Industry Rank. If an industry has the best average Zacks Rank, it would be considered the top industry (1 out of 250+), which would place it at the top 1% of Zacks-ranked industries. Studies have shown that roughly half of a stock's price movement can be attributed to the industry group it belongs to. In fact, the top 50% of Zacks-ranked industries outperforms the bottom 50% by a factor of more than 2 to 1.

Last EPS Surprise: The percentage deviation of a company's last reported earnings per share from the Zacks Consensus Estimate. Companies with a positive earnings surprise are more likely to surprise again in the future (or miss again if they recently missed).

Last Sales Surprise: The percentage deviation of a company's last reported sales from the Zacks Consensus Estimate.

Expected Report Date: This is an estimated date of a company's next earnings release. The information originated or gathered by Zacks Investment Research from its information providers or publicly available sources is the basis of this estimate.

Earnings ESP: The Zacks Earnings ESP compares the Most Accurate Estimate to the Zacks Consensus Estimate for the yet-to-be reported quarter. The Most Accurate Estimate is the most recent version of the Zacks Consensus EPS Estimate. The idea here is that analysts revising their estimates closer to an earnings release have the latest information, which could potentially be more accurate than what they and others contributing to the consensus had predicted earlier. Thus, a positive or negative Earnings ESP reading theoretically indicates the likely deviation of the actual earnings from the consensus estimate. However, the model's predictive power is significant for positive ESP readings only. A positive Earnings ESP is a strong predictor of an earnings beat, particularly when combined with a Zacks Rank #1 (Strong Buy), #2 (Buy) or #3 (Hold). Our research shows that stocks with this combination produce a positive surprise nearly 70% of the time.

Periods:

TTM: Trailing 12 months. Using TTM figures is an effective way of analyzing the most-recent financial data in an annualized format that helps neutralize the effects of seasonality and other quarter-to-quarter variation.

F1: Current fiscal year. This period is used to analyze the estimates for the ongoing full fiscal year.

F2: Next fiscal year. This period is used to analyze the estimates for the next full fiscal year.

F12M: Forward 12 months. Using F12M figures is an effective way of analyzing the near-term (the following four unreported quarters) estimates in an annualized manner. Instead of typically representing estimates for the full fiscal year, which may not represent the nitty-gritty of each quarter, F12M figures suggest an all-inclusive annualized estimate for the following four quarters. The annualization helps neutralize the potential effects of seasonality and other quarter-to-quarter variations.

P/E Ratio: The price-to-earnings ratio measures a company's current market price per share relative to its earnings per share (EPS). Usually, the trailing-12-month (TTM) EPS, current-fiscal-year (F1) EPS estimate, or forward-12-month (F12M) EPS estimate is used as the denominator. In essence, this ratio shows what the market is willing to pay today for each dollar of EPS. In other words, this ratio gives a sense of what the relative value of the company is at the already reported level of earnings or at a future level of earnings.

It is one of the most widely-used multiples for determining the value of a company and helps comparing its valuation with that of a competitor, the industry group or a benchmark.

PEG Ratio: The price/earnings to growth ratio is a stock's P/E ratio using current fiscal year (F1) EPS estimate divided by its expected EPS growth rate over the coming 3 to 5 years. This ratio essentially determines a stock's value by factoring in the company's expected earnings growth and is thus believed to provide a more complete picture than just the P/E ratio, particularly for faster-growing companies.

P/S Ratio: The price-to-sales ratio is calculated as a company's current price per share divided by trailing 12 months (TTM) sales or revenues per share. This ratio shows what the market is willing to pay today for each dollar of TTM sales per share. The P/S ratio is at times the only valuation metric when the company has yet to become profitable.

Cash/Price Ratio: The cash-to-price ratio or Cash Yield is calculated as cash and marketable securities per share divided by the company's current share price. Like the earnings yield, which shows the anticipated yield (or return) on a stock from earnings for each dollar invested, the cash yield does the same, with cash being the source of return instead of earnings. For example, a cash/price ratio of 0.08 suggests a return of 8% or 8 cents for every \$1 investment.

EV/EBITDA Ratio: The EV/EBITDA ratio, also known as Enterprise Multiple, is calculated as a company's enterprise value (market capitalization + value of total long-term debt + book value of preferred shares - cash and marketable securities) divided by EBITDA (earnings before interest, taxes, depreciation and amortization). Usually, trailing-12-month (TTM) or forward-12-month (F12M) EBITDA is used as the denominator.

EV/Sales Ratio: The enterprise value-to-sales ratio is calculated as a company's enterprise value (market capitalization + value of total long-term debt + book value of preferred shares - cash and marketable securities) divided by annual sales. It is an expansion of the P/S valuation, which uses market value instead of enterprise value. The EV/Sales ratio is perceived as more accurate than P/S, in part, because the market capitalization does not take a company's debt into account when valuing it.

EV/CF Ratio: The enterprise value-to-cash flow ratio is calculated as a company's enterprise value (market capitalization + value of total long-term debt + book value of preferred shares - cash and marketable securities) divided by the trailing-12-month (TTM) operating cash flow. It's a measure of how long it would take to buy the entire business if you were able to use all the company's operating cash flow.

The EV/CF ratio is perceived as more accurate than the P/CF ratio, in part, because the market price does not take a company's debt into account when valuing it.

EV/FCF Ratio: The enterprise value-to-free cash flow metric compares a company's enterprise value to its trailing-12-month (TTM) free cash flow (FCF). This metric is very similar to the EV/CF ratio, but is considered a more exact measure owing to the fact that it uses free cash flow, which subtracts capital expenditures (CAPEX) from a company's total operating cash flow, thereby reflecting the actual cash flow available for funding growth activities and payments to shareholders.

P/EBITDA Ratio: The P/EBITDA ratio is calculated as a company's per share market value divided by EBITDA (earnings before interest, taxes, depreciation, and amortization). This metric is very similar to the EV/EBITDA ratio, but is considered a little less exact measure as it uses market price, which does not take a company's debt into account. However, since EBITDA is often considered a proxy for cash income, the metric is used as a measure of what the market is willing to pay today for each dollar of the company's cash profitability in the trailing 12 months (TTM) or forward 12 months (F12M).

P/B Ratio: The price-to-book ratio is calculated as a company's current price per share divided by its book value (total assets – liabilities – preferred stocks) per share. In short, the book value is how much a company is worth. In other words, it reflects the total value of a company's assets that its common shareholders would receive if it were to be liquidated. So, the P/B ratio indicates whether you're paying higher or lower than what would remain if the company went bankrupt immediately. Investors typically use this metric to determine how a company's stock price stacks up to its intrinsic value.

P/TB Ratio: The price-to-tangible-book value ratio is calculated as the per share market value of a company divided by the value of its tangible assets (total assets – liabilities – preferred stocks – intangible assets) per share. Tangible book value is the same thing as book value except it excludes the value of intangible assets to get a step closer to the baseline value of the company.

P/CF Ratio: The price-to-cash flow ratio measures a company's per share market price relative to its trailing-12-month (TTM) operating cash flow per share. This metric is used to determine whether a company is undervalued or overvalued relative to another stock, industry or sector. And like the P/E ratio, a lower number is typically considered better from the value perspective.

One of the reasons why P/CF ratio is often preferred over P/E ratio is the fact that operating cash flow adds back non-cash expenses such as depreciation and amortization to net income. This feature helps valuing stocks that have positive cash flow but are not profitable because of large noncash charges.

P/FCF Ratio: The price-to-free cash flow ratio is an extension of P/CF ratio, which uses trailing-12-month (TTM) free cash flow per share instead of operating cash flow per share. This metric is considered a more exact measure than P/CF ratio, as free cash flow subtracts capital expenditures (CAPEX) from a company's total operating cash flow, thereby reflecting the actual cash flow available for funding activities that generate additional revenues.

Earnings Yield: The earnings yield is calculated as current fiscal year (F1) EPS estimate divided by the company's current share price. The ratio, which is the inverse of the P/E ratio, measures the anticipated yield (or return) from earnings for each dollar invested in a stock today.

For example, earnings yield for a stock, which is trading at \$35 and expected to earn \$3 per share in the current fiscal year (F1), would be 0.0857 ($3/35 = 0.0857$) or 8.57%. In other words, for \$1 invested in the stock today, the yield from earnings is anticipated to be 8.57 cents.

Investors most commonly compare the earnings yield of a stock to that of a broad market index (such as the S&P 500) and prevailing interest rates, such as the current 10-year Treasury yield. Since bonds and stocks compete for investors' dollars, stock investors typically demand a higher yield for the extra risk they assume compared to investors of U.S. Treasury-backed securities that offer virtually risk-free returns. This additional return is referred to as the risk premium.

Debt/Equity Ratio: The debt-to-equity ratio is calculated as a company's total liabilities divided by its shareholder equity. This metric is used to gauge a company's financial leverage. In other words, it is a measure of the degree to which a company is financing its operations through debt versus its own funds. The higher the ratio, the higher the risk for shareholders.

However, this ratio is difficult to compare across industry groups where ideal amounts of debt vary. Some businesses are more capital intensive than others and typically require higher debt to finance their operations. So, a company's debt-to-equity ratio should be compared with other companies in the same industry.

Cash Flow (\$/share): Cash flow per share is calculated as operating cash flow (after-tax earnings + depreciation + other non-cash charges) divided by common shares outstanding. It is used by many investors as a measure of a company's financial strength. Since cash flow per share takes into consideration a company's ability to generate cash by adding back non-cash expenses, it is regarded by some as a more accurate measure of a company's financial situation than earnings per share, which could be artificially deflated.

Current Ratio: The current ratio or liquidity ratio is a company's current assets divided by its current liabilities. It measures a company's ability to pay short-term obligations. A current ratio that is in line with the industry average or slightly higher is generally considered acceptable. A current ratio that is lower than the industry average would indicate a higher risk of distress or default. A higher number is usually better. However, a very high current ratio compared to the industry average could be an indication of inefficient use of assets by management.

Debt/Capital Ratio: Debt-to-capital ratio is a company's total debt (interest-bearing debt + both short- and long-term liabilities) divided its total capital (interest-bearing debt + shareholders' equity). It is a measure of a company's financial leverage. All else being equal, the higher the debt-to-capital ratio, the riskier the stock.

However, this ratio can vary widely from industry to industry, the ideal amount of required debt being different. Some businesses are more capital intensive than others and typically require higher debt to finance their operations. So, a company's debt-to-capital ratio should be compared with the same for its industry.

Net Margin: Net margin is calculated as net income divided by sales. It shows how much of each dollar in sales generated by a company translates into profit. For example, if a company's net margin is 15%, its net income is 15 cents for every \$1 of sales it makes.

A change in margin can reflect either a change in business conditions, or a company's cost controls, or both. If a company's expenses are growing faster than sales, its net margin will decline. However, different net margin rates are considered good for different industries, so it's better to compare net margin rates of companies in the same industry group.

Return on Equity: Return on equity (ROE) is calculated as trailing-12-month net income divided by trailing-12-month average shareholder equity (including reinvested earnings). This metric is considered a measure of how effectively management is using a company's assets to generate profits. For example, if a company's ROE is 10%, it creates 10 cents profits for every \$1 shareholder equity, which is basically the company's assets minus debt. A company's ROE deemed good or bad depends on what's normal for its peers or industry group.

Sales/Assets Ratio: The sales-to-assets ratio or asset utilization ratio or asset turnover ratio is calculated as a company's annual sales divided by average assets (average of assets at the beginning of the year and at the year's end). This metric helps investors understand how effectively a company is using its assets to generate sales. For example, a sales-to-assets ratio of 2.5 indicates that the company generated \$2.50 in sales for every \$1 of assets on its books.

The higher the sales-to-assets ratio, the better the company is performing. However, similar to many other ratios, the asset turnover ratio tends to be higher for companies in certain industries/sectors than in others. So, a company's sales-to-assets ratio should be compared with the same for its industry/sector.

Historical EPS Growth (3-5 Years): This is the average annual (trailing-12-month) EPS growth rate over the last 3-5 years. This metric helps investors see how a company's EPS has grown from a long-term perspective.

Note: There are many factors that can influence short-term numbers — a recession will reduce this number, while a recovery will inflate it. The longterm perspective helps smooth out short-term events.

Projected EPS Growth (F1/F0): This is the estimated EPS growth rate for the current financial year. It is calculated as the consensus estimate for the current fiscal year (F1) divided by the reported EPS for the last completed fiscal year (F0).

Current Cash Flow Growth: It measures the latest year-over-year change in operating cash flow. Cash flow growth tells an investor how quickly a company is generating inflows of cash from operations. A positive change in the cash flow is desired and shows that more 'cash' is coming in than going out.

Historical Cash Flow Growth (3-5 Years): This is the annualized change in cash flow over the last 3-5 years. The change in a longer period helps put the current reading into proper perspective. By looking at the rate, rather than the actual dollar value, the comparison across the industry and peers becomes easier.

Projected Sales Growth (F1/F0): This metric looks at the estimated sales growth for the current year. It is calculated as sales estimate for the current fiscal year (F1) divided by the reported sales for the last completed fiscal year (F0).

Like EPS growth, a higher rate is better for sales growth. A look at a company's projected sales growth instantly tells you what the outlook is for their products and services. However, different sales growth rates are considered good for different industries, so it's better to compare sales growth rates of companies in the same industry group.

EPS F1 Estimate 1-Week Change: The percentage change in the Zacks Consensus EPS estimate for the current fiscal year over the past week. The change in a company's consensus EPS estimate (or earnings estimate revision) has proven to be strongly correlated with the near-term price movement of its shares. It is an integral part of the Zacks Rank.

If a stock's consensus EPS estimate is \$1.10 now versus \$1.00 a week ago, that will be reflected as a 10% upward revision. If, on the other hand, it went from \$1.00 to 90 cents, that would be a 10% downward revision.

EPS F1 Estimate 4-Week Change: The percentage change in the Zacks Consensus EPS estimate for the current fiscal year over the past four weeks.

A stock's earnings estimate revision in a 1-week period is important. But it's more meaningful to look at the longer-term revision. And, of course, the 4-week change helps put the 1-week change into proper perspective.

EPS F1 Estimate 12-Week Change: The percentage change in the Zacks Consensus EPS estimate for the current fiscal year over the past 12 weeks.

This metric essentially shows how the consensus EPS estimate has changed over a period longer than 1 week or 4 weeks.

EPS Q1 Estimate Monthly Change: The percentage change in the Zacks Consensus EPS estimate for the current fiscal quarter over the past four weeks.

While the revision in consensus EPS estimate for the current fiscal year is strongly correlated with the near-term price movement of its shares, the estimate revision for the current fiscal quarter is an important metric as well, especially over the short term, and particularly as a stock approaches its earnings date. If a stock's Q1 EPS estimate decreases ahead of its earnings release, it's usually a negative sign, whereas an increase is a positive sign.