

Seagate Technology Plc (STX)

\$48.87 (As of 06/23/20)

Price Target (6-12 Months): \$51.00

Long Term: 6-12 Months	Zacks Recommendation: Neutro (Since: 03/25/20)			
	Prior Recommendation: Outperform			
Short Term: 1-3 Months	Zacks Rank: (1-5)		3-Hold	
	Zacks Style Scores:		VGM:A	
	Value: A	Momentum: B		

Summary

Seagate is expected to benefit from robust demand for 16terabyte products, as production to higher volumes improves. Increasing traction for mass storage solutions across edge and enterprise markets is a tailwind. Also, rapid adoption of nearline solutions is likely to boost the top line in the quarters ahead. Higher HDD demand of mass capacity storage products from hyperscalers, driven by data growth at the edge and in the cloud, is a positive. Further, the company provided encouraging guidance for the fiscal fourth quarter. Notably, shares have outperformed the industry on a year-to-date increasing expenses on product basis. However, enhancements amid stiff competition from its peers in the disk drive market might limit margin expansion in the near term. Moreover, the coronavirus outbreak is exerting pressure on Legacy market revenues.

Data Overview

52 Week High-Low	\$64.17 - \$39.02
20 Day Average Volume (sh)	3,519,803
Market Cap	\$12.5 B
YTD Price Change	-17.9%
Beta	1.08
Dividend / Div Yld	\$2.60 / 5.3%
Industry	Computer- Storage Devices
Zacks Industry Rank	Bottom 39% (154 out of 253)

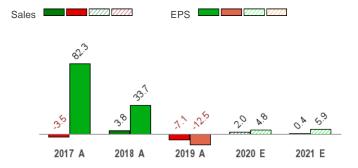
Last EPS Surprise	7.0%
Last Sales Surprise	4.6%
EPS F1 Est- 4 week change	0.0%
Expected Report Date 08	8/07/2020
Earnings ESP	0.0%

P/E TTM	10.6
P/E F1	9.7
PEG F1	8.0
P/S TTM	1.2

Price, Consensus & Surprise



Sales and EPS Growth Rates (Y/Y %)



Sales Estimates (millions of \$)

	Q1	Q2	Q3	Q4	Annual*
2021	2,659 E	2,780 E	2,741 E	2,746 E	10,644 E
2020	2,578 A	2,696 A	2,718 A	2,607 E	10,598 E
2019	2,991 A	2,715 A	2,313 A	2,371 A	10,390 A

EPS Estimates

	Q1	Q2	Q3	Q4	Annual*
2021	\$1.34 E	\$1.46 E	\$1.35 E	\$1.37 E	\$5.35 E
2020	\$1.03 A	\$1.35 A	\$1.38 A	\$1.28 E	\$5.05 E
2019	\$1.70 A	\$1.41 A	\$0.83 A	\$0.86 A	\$4.82 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 06/23/2020. The reports text is as of 06/24/2020.

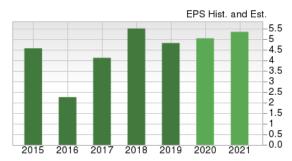
Overview

Headquartered at Dublin, Ireland, Seagate is the second-largest manufacturer of hard disk drives (HDDs) in the U.S. HDDs are used as the primary medium for storing electronic information in systems ranging from desktop computers and consumer electronics to data centers delivering information over corporate networks and the Internet.

Seagate also develops other electronic data storage products such as SSD (solid state drive) and solid state hybrid drives (SSHD). The company has an industry-leading vertically-integrated operation with internal control over the majority of its key component suppliers.

The company's HDD products are designed for mission critical and nearline applications in enterprise servers and storage systems; edge compute/clientcompute applications. SSD products mainly comprise serial attached SCSI ("SAS") and Non-Volatile Memory Express ("NVMe") SSDs. Cloud systems and solutions portfolio incorporates modular original equipment manufacturer ("OEM") storage systems and scale-out storage servers.

Seagate reported revenues of \$10.397 billion in fiscal 2019. The company offers its products under two heads — mass capacity storage and Legacy. The company enhanced its position in SSDs with the acquisition of Samsung's HDD operations and the French drive maker, LaCie. In fiscal 2019, the company shipped 347 exabytes of HDD storage capacity.





Geographically, revenues from the Americas accounted for 32% of fiscal 2019 revenues, EMEA brought in 19% and the remaining 49% came from Asia Pacific.

Seagate primarily sells to OEMs but supplements this with sales through distributors and retailers. Major OEM customers include Dell Inc., HP Inc, IBM and Oracle. Revenues from the OEMs accounted for 70% of fiscal 2019 revenues, Distributors brought in 17% and the remaining 13% came from Retailers.

The disk drive market is highly competitive and the company mainly competes with manufacturers of hard drives used in the enterprise, edge compute/client compute and edge non-compute/client non-compute applications and with other companies in the data storage industry that provide SSDs and NVMe add-in technology. Micron Technology, Western Digital Samsung Electronics and SK Hynix are few of the major competitors of Seagate.



Reasons To Buy:

▶ Prominent storage players, like Seagate have been expanding into the SSD storage market. SSDs are faster and more energy efficient than traditional hard drives. These also occupy less space and are thus more suitable for mobile computing devices. The emergence of thinner laptops and tablets over the past few years has created an ideal market for SSDs, which are therefore entering the higher end of the market. SSDs are also being used in servers due to lower latency, which in turn facilitates faster response to real-time applications. E-Commerce and financial enterprises need quicker response time and thus data centers serving these clients are opting for SSDs. The secular growth of digital data, modest growth in the TAM and higher demand for storage will drive growth for storage in general, and especially for SSDs. The SSD segment's growth potential is a major positive for Seagate.

Seagate is focusing on the enterprise side, where it could acquire higher-margin business. Synergies from acquisitions and product innovations are the other growth catalysts.

- ▲ Seagate has been active on the acquisition front. The acquisitions made over the past several years which include Lyve Minds, Dot Hill Systems, Conner Peripherals, Mirra, ActionFront Data Recovery Labs, Maxtor, MetaLINCS and Xyratex have not only helped the company in expanding product portfolio but have also strengthened its small-to-medium sized business solutions. The acquisitions of Accelerated Solutions Division (ASD) and Flash Components Division (FCD) from Avago Technologies in 2014 not only boosted Seagate's enterprise-class PCIe flash offerings but also enhanced the SSD controller capabilities. Seagate is poised to gain from the acquisition as PCIe-based SSDs are in demand from enterprises dealing with online transaction processing and data warehousing. Moreover, in 2015, the company acquired Dot Hill Systems to boost its enterprise side business further. The company's ability to generate substantial operating cash flows allows it to pursue frequent acquisitions. These takeovers are expected to provide the company with a competitive edge.
- ▲ Seagate is focusing more on the enterprise side, which is the key growth area in the information technology sector. Anticipating a potential acceleration in cloud deployments (due to exponential growth in data storage in the cloud), Seagate is investing heavily to deliver high-capacity storage devices that would support expansion of cloud infrastructure and cloud applications. The company in 2015 acquired Dot Hill Systems Corp. which is engaged in designing, manufacturing and marketing of a wide range of software and hardware storage systems, including hybrid storage arrays, for clients ranging from SMBs to enterprise. We believe that the acquisition of Dot Hill is in line with the company's strategy to focus more on the enterprise side, where it could gain higher-margin business. Seagate also believes that higher demand for cloud storage will lead to improved pricing for enterprise-class drives, mainly due to supply constraints. The company expects cloud-based solutions to drive revenue growth in the near term. Seagate's expectations stems from the fact that IDC expects 49% of the 175 ZB data produced in 2025 to be stored in the cloud.
- ▲ Seagate generates solid cash flow, which allows management the opportunity to invest in product innovations, acquisitions and business development. At the same time, the company has historically returned significant cash through a combination of share repurchases and dividend to reward shareholders with risk-adjusted returns. In fiscal third quarter, Seagate reported cash flow from operations of \$390 million and free cash flow of \$260 million. In third-quarter fiscal 2020, the company repurchased 4 million shares worth \$195 million and paid out dividends worth \$170 million. As of Apr 3, 2020, \$1.3 billion worth of shares were available for repurchase under the existing repurchase authorization limit. These investor-friendly initiatives not only boost earnings but also instill investors' confidence and loyalty. The company's ability to generate solid free cash flow is expected to help it sustain current dividend payout (0.59) level, at least in the near term.

Reasons To Sell:

▼ The merger between Western Digital and SanDisk has made it more challenging for Seagate to capture market share in the newer storage technology – SSD. The merger will lead to economies of scale, lower costs, greater market reach and acquisitions of new technologies, among other synergies, for the two major storage solution providers. The companies will also be able to offer competitive solutions in cloud-based computing, which has overtaken digital storage solution space over the past couple of years. Therefore, it will be difficult for Seagate to remain competitive in the storage business. The disk drive market is highly competitive and has experienced drastic pricing pressure due to supply/demand volatility. In the near future, hard disk companies might be exposed to pressures as customers, such as tablet PC makers

Sluggish macroeconomic conditions, a flattish price environment, and competition from Western Digital and SanDisk remain near-term headwinds.

choose flash cards for storage purposes over the customary hard disks. The situation may compel companies to slash hard disk prices, in turn hurting margins.

- ▼ Seagate derives a significant proportion of its revenues from outside the United States (almost 31.8% of total revenues in fiscal 2019), subjecting the company to exchange rate volatility. Unfavorable movement in exchange rates of foreign currencies like euro and pound sterling, related to the U.S. dollar can adversely impact results and undermine its growth potential to some extent. Further, the coronavirus outbreak is likely to exert pressure on Legacy market revenues.
- ▼ In addition, high indebtedness adds to the risk of investing in the company. As of April 3, 2020, Seagate's net debt amounted to \$2.493 billion compared with \$2.401 billion as of Jan 3, 2020. Moreover, total debt to total capital of 69.6% is higher than the industry's figure of 55.1%. Although the company generates significant cash flow, the high debt level can not only jeopardize its ability to sustain dividend payout and buyback shares but also pursue accretive acquisitions.
- ▼ PCs continue to be the biggest users of HDDs, and Seagate still derives the bulk of its revenues from these devices. Per Gartner's preliminary data, PC shipments in first-quarter 2020 declined 12.3% year over year to 51.6 million units. Going by the IDC report, shipments were down 9.8% on a year-over-year basis and totaled 53.2 million in the period under review. A declining trend in PC shipments negatively impacted business prospects of Seagate, which continues to depend substantially on PC sales.

Last Earnings Report

Seagate Q3 Earnings Top Estimates, Revenues Up Y/Y

Seagate reported third-quarter fiscal 2020 non-GAAP earnings of \$1.38 per share, which surged 48.4% from the year-ago quarter's reported figure.

Non-GAAP revenues of \$2.718 billion increased 17.5% from the year-ago quarter's level.

Exabyte Shipments in Detail

During the reported quarter, Seagate shipped 120.2 exabytes of hard disk drive (HDD) storage,

with an average capacity of record 4.1 terabytes (TB) per drive. This marked year-over-year and sequential improvement of 70% and 26% in the total HDD exabytes shipments, respectively. Notably, average capacity improved from 3.3 TB and 2.4 TB reported in the prior quarter and the year-ago quarter, respectively.

Quarter Ending

Report Date

Sales Surprise

EPS Surprise

Quarterly EPS

Annual EPS (TTM)

03/2020

4.59%

6.98%

1.38

4.62

Apr 22, 2020

The company shipped 91.1 exabytes for the mass capacity storage market (includes nearline and video and image applications as well as network-attached storage or NAS). This marked a sequential increase of 28% in exabytes shipments. Average capacity per drive increased sequentially from 6.4 TB to 8.2 TB.

In the nearline market, the company shipped 76.4 exabytes of HDD, up 55.9% sequentially and with an average capacity of 10 terabytes. This was driven by strong demand from cloud and hyperscale customers.

Management anticipates robust demand for the company's 16-terabyte capacity products to be a key catalyst in the days ahead, as production to higher volumes improves. Notably, the 16-terabyte nearline drive witnessed more than double revenue growth sequentially.

The company shipped 29.1 exabytes for the Legacy market (includes mission-critical, notebook, desktop, gaming consoles, digital video recorders or DVR and external consumer devices) with an average capacity of 1.6 TB. This marked a sequential decline of 18% in exabytes shipments. Notably, average capacity remained flat sequentially.

This was due to the initial outbreak in China and longer New Year impacting demand for consumer electronics.

Notably, mass capacity and legacy verticals contributed 57% and 36% to total revenues, respectively.

Revenues by Product Group

Total HDD revenues (92.9% of revenues) increased 1.8% year over year to \$2.526 billion in the reported quarter.

Non-HDD segment revenues (7.1% of revenues), which includes enterprise data solutions, cloud systems and SSDs, declined 10.7% year over year to \$192 million.

Margin Details

Non-GAAP gross margin expanded 120 basis points (bps) on a year-over-year basis to 28%. This includes an approximate 100 bps impact from higher logistic, underutilization and operational cost-related coronavirus disruption.

Non-GAAP operating expenses were up 4% on a year-over-year basis to \$340 million.

Non-GAAP income from operations came in at \$422 million, up 43.5% from the year-ago quarter's figure. Non-GAAP operating margin expanded 280 bps from the year-ago quarter's reported figure to 15.5%.

Balance Sheet and Cash Flow

As of Apr 3, 2020, cash and cash equivalents were \$1.61 billion compared with \$1.74 billion as of Jan 3, 2020.

Seagate ended fiscal third quarter with a long-term debt (including current portion) of \$4.103 billion, compared with \$4.141 billion in the last reported quarter.

 $Cash \ flow \ from \ operations \ was \ \$390 \ million \ compared \ with \ \$480 \ million \ reported \ in \ the \ previous \ quarter.$

Free cash flow for the reported quarter amounted to \$260 million compared with \$286 million in the last reported quarter.

Guidance

Management anticipates fourth-quarter fiscal 2020 revenues to be 2.6 billion (+/- 7%).

Non-GAAP earnings per share for fiscal fourth quarter is expected to be \$1.28 (+/- 10%).

Recent News

On Jun 16, Seagate announced the pricing of its offering of an additional \$500-million principal amount notes slated to mature in 2029. The notes carry an annualized interest rate of 4.091%, payable annually.

On Jun 3, Seagate announced the pricing of its offering of an additional \$500-million principal amount of its 4.125% senior notes slated to mature in 2031. The notes are priced at 99.859% of the aggregate principal amount and the sale is expected to close on Jun 10, 2020.

On the same day, Seagate announced exchange offers for eligible holders of the company's outstanding debt securities to exchange existing notes for up to \$500 million worth of new senior notes due in 2029.

On May 21, Seagate signed the 'Open COVID' Pledge' to contribute to the fight against the pandemic. The pledge grants free access to all of Seagate's patented technologies to help enable diagnosing, preventing, containing, and treating of COVID-19.

On Apr 22, Seagate's board of directors announced a cash dividend of 65 cents per share, payable on Jul 8 to shareholders as on Jun 24.

On Mar 17, Seagate announced the launch of the IronWolf 510 SSD with caching speeds of up to 3GBps for NVMe-compatible systems. It is the first PCIe SSD designed for multi-user business NAS environments.

Valuation

Seagate's shares have declined 17.9% in the year-to-date period but rallied 5.7% over the trailing 12-month period. Stocks in the Zacks sub-industry fell 22.7%, while the same in the Zacks Computer & Technology sector rose 10.7% in the year-to-date period. Over the past year, the Zacks sub-industry is down 7.8%, while the sector is 25.8%.

The S&P 500 index is down 3.2% in the year-to-date period but up 7% in the past year.

The stock is currently trading at 9.14X forward 12-month earnings, which compares to 13.02X for the Zacks sub-industry, 25.62X for the Zacks sector and 22.37X for the S&P 500 index.

Over the past five years, the stock has traded as high as 15.18X and as low as 6X, with a five-year median of 10.03X. Our Neutral recommendation indicates that the stock will perform in line with the market. Our \$51 price target reflects 9.55X forward 12-month earnings.

The table below shows summary valuation data for STX

Valuation Multiples - STX						
		Stock	Sub-Industry	Sector	S&P 500	
	Current	9.14	13.02	25.62	22.37	
P/E F12M	5-Year High	15.18	16.98	25.62	22.37	
	5-Year Low	6	9.94	16.72	15.23	
	5-Year Median	10.03	12.14	19.28	17.49	
	Current	1.18	1	3.85	3.5	
P/S F12M	5-Year High	1.65	1.41	3.85	3.5	
	5-Year Low	0.53	0.8	2.32	2.53	
	5-Year Median	1.17	1.14	3.11	3.02	
1	Current	13.15	9.87	12.64	11.56	
EV/EBITDA TTM	5-Year High	17.82	13.2	12.72	12.85	
	5-Year Low	4.67	2.77	7.57	8.25	
	5-Year Median	6.85	5.48	10.77	10.83	

As of 06/23/2020

Industry Analysis Zacks Industry Rank: Bottom 39% (154 out of 253)

■ Industry Price ■ Price -65 Industry -55 -50

Top Peers

Company (Ticker)	Rec	Rank
Intel Corporation (INTC)	Neutral	3
Micron Technology, Inc. (MU)	Neutral	2
NetApp, Inc. (NTAP)	Neutral	3
Pure Storage, Inc. (PSTG)	Neutral	2
Qumu Corporation (QUMU)	Neutral	4
Samsung Electronics Co. (SSNLF)	Neutral	4
Teradata Corporation (TDC)	Neutral	3
Western Digital Corporation (WDC)	Neutral	3

Industry Comparison Industr	Industry Comparison Industry: Computer- Storage Devices			Industry Peers			
	STX	X Industry	S&P 500	MU	PSTG	WDC	
Zacks Recommendation (Long Term)	Neutral	-	-	Neutral	Neutral	Neutra	
Zacks Rank (Short Term)	3	-	-	2	2	3	
VGM Score	Α	-	-	В	С	А	
Market Cap	12.54 B	1.62 B	21.86 B	55.43 B	4.56 B	13.04 B	
# of Analysts	7	4	14	7	10	7	
Dividend Yield	5.32%	0.00%	1.92%	0.00%	0.00%	4.60%	
Value Score	Α	-	-	Α	F	Α	
Cash/Price	0.12	0.22	0.07	0.13	0.28	0.22	
EV/EBITDA	7.03	-4.27	12.65	4.24	-49.75	9.57	
PEG Ratio	7.91	2.00	2.90	1.96	2.43	NA	
Price/Book (P/B)	7.00	4.58	2.99	1.50	6.01	1.41	
Price/Cash Flow (P/CF)	6.86	9.23	11.61	4.39	NA	4.29	
P/E (F1)	9.58	12.75	21.08	20.06	70.57	14.45	
Price/Sales (P/S)	1.21	1.21	2.25	2.83	2.71	0.81	
Earnings Yield	10.33%	6.92%	4.42%	4.98%	1.39%	6.92%	
Debt/Equity	2.28	0.20	0.77	0.15	0.77	1.01	
Cash Flow (\$/share)	7.12	-0.07	7.01	11.36	-0.17	10.15	
Growth Score	В	-	-	D	Α	В	
Hist. EPS Growth (3-5 yrs)	11.81%	-6.87%	10.84%	69.73%	NA	-25.55%	
Proj. EPS Growth (F1/F0)	4.68%	0.17%	-10.80%	-60.88%	-15.86%	-37.78%	
Curr. Cash Flow Growth	-13.19%	-28.62%	5.46%	-35.35%	-37.62%	-53.72%	
Hist. Cash Flow Growth (3-5 yrs)	-6.14%	2.63%	8.55%	15.84%	11.70%	-1.49%	
Current Ratio	1.49	1.49	1.29	2.74	3.12	1.91	
Debt/Capital	69.54%	43.38%	45.14%	13.61%	43.38%	50.27%	
Net Margin	17.57%	-2.58%	10.53%	11.72%	-11.36%	-3.70%	
Return on Equity	62.81%	1.66%	16.06%	7.16%	-17.24%	3.42%	
Sales/Assets	1.17	0.90	0.55	0.40	0.75	0.62	
Proj. Sales Growth (F1/F0)	2.00%	0.00%	-2.66%	-11.36%	3.82%	1.37%	
Momentum Score	В	-	-	Α	C	С	
Daily Price Chg	-4.01%	0.00%	0.04%	-2.56%	3.11%	-3.55%	
1 Week Price Chg	2.85%	2.71%	0.92%	4.40%	8.07%	3.35%	
4 Week Price Chg	-4.55%	-1.43%	2.71%	8.82%	2.20%	-3.46%	
12 Week Price Chg	0.14%	38.64%	19.78%	18.50%	40.00%	4.54%	
52 Week Price Chg	5.76%	5.76%	-6.05%	52.51%	9.47%	5.86%	
20 Day Average Volume	3,519,803	674,405	2,819,961	25,816,448	3,336,840	6,037,987	
(F1) EPS Est 1 week change	0.00%	0.00%	0.00%	0.00%	-1.36%	0.00%	
(F1) EPS Est 4 week change	0.00%	0.00%	0.00%	19.27%	37.68%	0.00%	
(F1) EPS Est 12 week change	-5.28%	-24.31%	-12.72%	13.77%	25.19%	-4.44%	
(Q1) EPS Est Mthly Chg	0.00%	0.00%	0.00%	23.18%	35.93%	0.00%	

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.

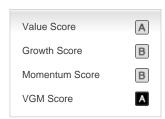
Zacks Rank

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

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.