

Tapestry, Inc. (TPR)

\$43.48 (As of 06/25/21)

Price Target (6-12 Months): \$46.00

Long Term: 6-12 Months Zacks Recommendation: Neutral

(Since: 04/09/21)

Value: C

Prior Recommendation: Outperform

Growth: C

2-Buy Short Term: 1-3 Months Zacks Rank: (1-5)

Zacks Style Scores:

Momentum: B

VGM:B

Summary

Shares of Tapestry have risen and outpaced the industry in the past six months. Markedly, the stock has been gaining following the company's impressive performance that continued in third-quarter fiscal 2021, despite a challenging backdrop. The company witnessed significant improvement in sales trends on a sequential basis. Management highlighted that strength in e-commerce and sales growth in Mainland China acted as tailwinds. Also, the company attained a meaningful improvement in earnings per share owing to gross margin expansion and lower SG&A expenses. Tapestry's impressive results validate significant progress on earlier announced Acceleration Program. Management views fiscal 2021 revenue to rise at a mid-teens rate on both a 52 and 53week basis. This includes the expectation for fourth-quarter sales to increase roughly 110%.

Data Overview

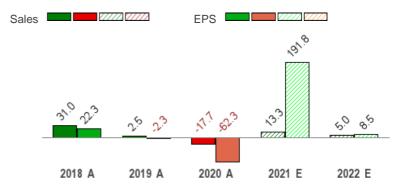
52-Week High-Low	\$49.67 - \$12.16
20-Day Average Volume (Shares)	3,091,113
Market Cap	\$12.1 B
Year-To-Date Price Change	39.9%
Beta	1.53
Dividend / Dividend Yield	\$0.00 / 0.0%
Industry	Retail - Apparel and Shoes
Zacks Industry Rank	Top 21% (52 out of 252)

Last EPS Surprise	70.0%
Last Sales Surprise	3.5%
EPS F1 Estimate 4-Week Change	0.6%
Expected Report Date	08/12/2021
Earnings ESP	0.0%
P/E TTM	21.9
P/E F1	15.4
PEG F1	1.5
P/S TTM	2.5

Price, Consensus & Surprise



Sales and EPS Growth Rates (Y/Y %)



Sales Estimates (millions of \$)

	Q1	Q2	Q3	Q4	Annual*
2022	1,336 E	1,785 E	1,302 E	1,487 E	5,903 E
2021	1,172 A	1,685 A	1,273 A	1,584 E	5,623 E
2020	1,358 A	1,816 A	1,073 A	715 A	4,961 A

EPS Estimates

	Q1	Q2	Q3	Q4	Annual*
2022	\$0.61 E	\$1.21 E	\$0.54 E	\$0.77 E	\$3.07 E
2021	\$0.58 A	\$1.15 A	\$0.51 A	\$0.64 E	\$2.83 E
2020	\$0.40 A	\$1.10 A	-\$0.27 A	-\$0.25 A	\$0.97 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 06/25/2021. The report's text and the

analyst-provided price target are as of 06/28/2021.	
ast performance is no quarantee of future results. Please see important disclosures and definitions at the end of this report	

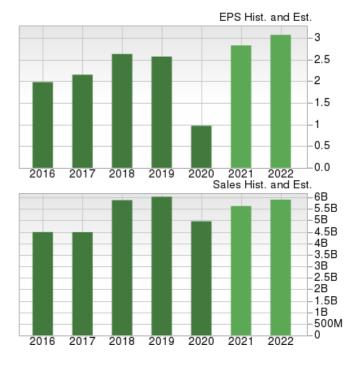
Page 2 of 19

Overview

Founded in 1941 and headquartered in New York, Tapestry, Inc. (TPR), which was formerly known as Coach, Inc., is the designer and marketer of fine accessories and gifts for women and men in the United States and internationally. The Company offers lifestyle products, which include handbags, women's and men's accessories, footwear, jewelry, seasonal apparel collections, sunwear, travel bags, fragrance and watches. Tapestry now operate under three segments comprising Coach brand (North America and International - 71% of FY20 Sales), Kate Spade & Company (23% of FY20 Sales) and Stuart Weitzman (6% of FY20 Sales).

Coach Brand North American segment includes sales to customers via North American company-owned stores, including the Internet, and sales to North American wholesale customers and distributors.

Coach Brand International segment includes sales via company-operated outlets (including the Internet) and concession store-in-stores in — Japan, mainland China, Hong Kong, Macau, Singapore, Taiwan, Malaysia, South Korea, the United Kingdom, France, Ireland, Spain, Portugal, Germany, Italy, Austria, Belgium, the Netherlands and Switzerland. Additionally, International includes sales to consumers through the Internet in Japan, mainland China, the United Kingdom and South Korea, as well as sales to wholesale customers and distributors in about 55 countries.



Stuart Weitzman segment includes sales generated by the Stuart Weitzman brand globally, principally via department stores in North America and international locations, within numerous independent third party distributors and within Stuart Weitzman operated stores, comprising the Internet, in the U.S., Canada and Europe.

Kate Spade & Company, which designs and markets accessories and apparel under two multichannel lifestyle brands – kate spade new york and Jack Spade New York.



Zacks Equity Research www.zackspro.com Page 3 of 19

Reasons To Buy:

▲ Better-Than-Expected Q3 Results: Tapestry witnessed significant improvement in sales trends on a sequential basis during the third quarter of fiscal 2021. While the quarter marked the sixth straight top-line beat, the bottom line surpassed the Zacks Consensus Estimate for the fourth time. Also, the company attained a meaningful improvement in earnings per share on a year-over-year basis owing to gross margin expansion and lower SG&A expenses. Management stated that quarterly results came ahead of expectations. Notably, the company continued with its sturdy e-commerce performance with digital sales rising in triple digits compared with the year-ago period, and accounting for roughly 30% of total revenues. The company recruited nearly 700,000 new customers via its e-commerce channels in North America and witnessed higher purchase frequency year over year. Impressively, the company registered about 175% year-over-year increase in sales in Mainland China. Additionally, as a part of global fleet optimization, the company notified the closure of 49 net stores in the first

Tapestry's long-term growth drivers include deepening engagement with consumers, creating innovative and compelling products, venturing into under-penetrated markets and enhancement of omnichannel capabilities.

nine months of the fiscal year. The company's actions to lower promotional activity and improve Average Unit Retail or AURs across brands as well as disciplined inventory and expense management helped post third successive quarter of operating income growth. Management notified that mass inoculation drive is resulting in increased consumer confidence, sturdy demand for categories, and improving in-store traffic trends. We note that shares of Tapestry have risen 44.5% in the past six months, while the industry gained 34.7%.

- ▲ Growth Drivers: Tapestry's long-term growth drivers include deepening engagement with consumers, creating innovative and compelling products, venturing into under-penetrated markets and enhancement of digital and data analytics capabilities. Notably, the company's compelling pricing strategy, smaller format locations and cost-effective global sourcing model have been contributing in enhancing store productivity. During third-quarter fiscal 2021, the company reduced total SKU counts by 30-50% across brands and improved assortment productivity. Management also simplified organization structure and lowered corporate headcount by 20%. No wonder, these strategies should help drive sales and margins. From growth perspective, China remains one of the prominent markets for Tapestry. The company has been accelerating growth in the region through tailored and innovative product assortments, enhanced marketing and expanded reach across direct channels and third-party online distribution. Tapestry has a strategic alliance with Alibaba's Tmall, China's largest B2C e-commerce platform. The company has been expanding digitally through the rollout of the Luxury Soho flagship for Coach on TMall. The company recaptured tourist demand through the China duty-free channel as consumers increasingly shift to domestic travel. The company also became the first luxury brand to launch an e-commerce platform on Dalian, the TikTok of China. Additionally, the company has been expanding its digital distribution channels with focus on enhancing curbside or store pickup service as well as contactless payment options, and the opportunity to make virtual appointments.
- Acceleration Program: Tapestry's impressive performance validates significant progress on Acceleration Program with multi-year initiatives to drive revenue growth, gross margin expansion and operating leverage across its portfolio. The program aims at transforming into a leaner and more responsive organization, building significant data and analytics capabilities with focus on enhancing digital and omnichannel capabilities, and operating with a clearly defined path and strategy for each brand. Management remains on track to realize about \$300 million in gross run rate expense savings from these endeavors, including \$200 million projected for fiscal 2021. Although management did not provide detailed guidance for fiscal 2021 owing to the ongoing pandemic, it is undertaking actions to lower promotional activity and improve Average Unit Retail or AURs across brands. These are contributing to gross margin expansion. The company is also right sizing store fleet. With regards to Stuart Weitzman the company had earlier notified that it intends to rationalize the North America retail fleet by reducing the number of doors in fiscal 2021 and close all direct locations in Europe, Japan, Australia and Malaysia. Again, given stronger-than-expected results year-to-date and anticipating a sustained recovery, Tapestry now envisions revenues for fiscal 2021 to improve at a mid-teens rate on both a 52 and 53-week basis. This includes the expectation for fourth-quarter sales to increase roughly 110% (on a 13-week basis). The final quarter also include the impact of one extra week, which is likely to contribute about \$100 million in incremental sales. The company anticipates operating income and earnings per share to increase compared with fiscal 2019 on a 52 and 53-week basis. Management continues to envisions significant gross margin expansion for the fiscal year owing to lower promotional activity and higher AURs.
- ▲ Undergoing Brand Transformation: Tapestry has undertaken transformation initiatives revolving around, product, stores and marketing. The acquisitions of Stuart Weitzman and Kate Spade have facilitated it to emerge as a multi-brand company. Also, the company is introducing modern luxury concept stores in key markets. Moreover, the company has undertaken strategic measures involving upgrading of core technology platforms and enhancement of international supply chain. The company is focusing beyond bags into women's and men's footwear and ready-to-wear categories. It is focusing on renewing Stuart Weitzman brand's reputation for fit, comfort and quality, and growing key categories by building a leading presence in boots, booties and sandals and expanding the casual assortment. The company also intends to strengthen relationship with wholesale partners. With respect to Kate Spade, the company remains focused on growing handbags and leathergoods, and capitalizing on a new Signature platform.
- ▲ Financial Flexibility: Tapestry ended third-quarter fiscal 2021 with cash, cash equivalents and short-term investments of \$1,659.2 million, which reflects an increase of 0.4% on a sequential basis. Also, the company's debt-to-capitalization ratio was 0.35 at the end of the quarter under review, which showcased an improvement from 0.38 at the end of the preceding quarter. The company utilized free cash flow to pay down the remaining \$200 million balance on revolver at the beginning of the quarter. The company generated free cash flow of \$179 million during the quarter and \$876 million year-to-date. The company also efficiently managed inventories, which were down 18% from the prior-year period.

Reasons To Sell:

▼ Probable Headwinds: Soft brick-&-mortar traffic, unprecedented store closures, capacity limits as well as higher freight costs and shipping constraints are some of the headwinds Tapestry might have to encounter with. Across the balance of Asia, sales remained below prepandemic levels, mainly in Japan, given the declaration of a state of emergency during the third quarter of fiscal 2021. As far as Europe is concerned, the company experienced significant slowdown in the business owing to restrictions imposed. However, the region accounts for a small portion of total sales.

On its third-quarter fiscal 2021 earnings call, management highlighted that the company is witnessing some distribution network disruption owing to the pandemic, causing shipping capacity constraints and port congestion globally. Consequently, the company anticipates

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longer lead times, which will delay the timing of receipts and limit ability to chase higher levels of demand should it materialize. Additionally, management informed that the widely reported Suez Canal blockage will have a modest impact on the company's fourth-quarter results.

- ▼ Deleverage in SG&A Expenses a Concern: Tapestry estimates more than 40% increase in SG&A expenses during the fourth quarter of fiscal 2021 (on a 13-week basis) on account of increased investments, notably in marketing as well as the impact of lapping depressed expense levels from a year ago as a result of the pandemic, which included the benefit from the cancellation of the annual incentive plan. During third-quarter fiscal 2021, Coach brand witnessed SG&A expenses of \$441.5 million, which reflects an increase of 4.8% on a year-over-year basis.
- ▼ Adverse Currency Fluctuations May Hurt Results: Tapestry generates a significant amount of net sales outside the U.S. Due to high exposure to international markets the company remains prone to currency fluctuations. The weakening of foreign currencies against the U.S. dollar may require the company to either raise prices or contract profit margins in locations outside of the U.S. An increase in price may have an adverse impact on the demand for the products.
- ▼ Dip in Consumer Sentiment May Impact Sales: Any dip in consumer confidence a key determinant of the economy's health may have serious bearing on spending. The company's customers remain sensitive to macroeconomic factors including interest rate hikes, increase in fuel and energy costs, credit availability, unemployment levels, and high household debt levels, which may negatively impact their sentiment. For now, the novel coronavirus has wreaked havoc. The retail sector, in particular, remains under pressure.
- ▼ Fashion Obsolescence: Fashion obsolescence remains the main concern for Tapestry's business model, which involves a sustained focus on product and design innovation. The company's pioneering position may be compromised by delays in its product launches. The company operates in the highly competitive premium handbag and accessories segment. The company faces stiff competition from European luxury brands as well as private label retailers on distinctiveness, innovativeness, quality and pricing, which may weigh on its results.

Zacks Equity Research www.zackspro.com Page 6 of 19

Last Earnings Report

Tapestry's Q3 Earnings & Sales Beat Estimates, Rise Y/Y

In spite of a challenging backdrop, Tapestry, Inc. reported better-than-expected results for thirdquarter fiscal 2021. This house of modern luxury accessories and lifestyle brands witnessed a significant improvement in sales trends on a sequential basis. While the quarter marked the sixth straight top-line beat, the bottom line surpassed the Zacks Consensus Estimate for the fourth time. Also, the company attained a meaningful improvement in earnings per share on a year-overyear basis owing to gross margin expansion and lower SG&A expenses.

Quarter Ending	03/2021
Report Date	May 06, 2021
Sales Surprise	3.52%
EPS Surprise	70.00%
Quarterly EPS	0.51
Annual EPS (TTM)	1.99

Management highlighted that strength in e-commerce and China contributed to this upbeat performance. In fact, the company saw a triple-digit increase in digital sales globally, thereby bringing digital sales to about 30% of total revenues. Notably, the company registered new customer acquisition across all brands and witnessed improvement across its brick-and-mortar business.

Tapestry posted adjusted earnings of 51 cents per share that surpassed the Zacks Consensus Estimate of 30 cents. Also, the bottom line compared favorably with adjusted loss of 27 cents per share in the year-ago quarter.

Net sales of this New York-based company were \$1,273.3 million, ahead of the Zacks Consensus Estimate of \$1,230 million. Moreover, the metric increased 18.7% on a year-over-year basis.

Let's Take an Insight

Clearly, Tapestry's impressive performance reflects significant progress with the previously-announced Acceleration Program. The program aims at transforming into a leaner and more responsive organization, building significant data and analytics capabilities with focus on ecommerce channels, and operating with a clearly defined path and strategy for each brand.

Impressively, management made significant progress on its Acceleration Program. It recruited nearly 700,000 new customers via its e-commerce channels in North America and witnessed higher purchase frequency year over year. The company saw significant growth in China on integrated and comprehensive brand-building strategies with innovative product and solid marketing efforts.

The company reduced total SKU counts by 30-50% across brands and improved assortment productivity. Management also simplified organization structure and lowered corporate headcount by 20%.

Tapestry registered revenue growth of about 175% in Mainland China during the third quarter when compared with fiscal 2020 and 40% increase when compared with fiscal 2019. The company witnessed mid-teens sales increase in North America, representing a return to pre-pandemic levels.

Moreover, Tapestry used data and analytics tools across its platform to enhance customer experience. It has also been enhancing the flexibility of its operating model via a streamlined organizational structure and optimized global fleet. Markedly, it is on track to realize about \$300 million in gross run rate expense savings, including \$200 million projected for fiscal 2021.

Although management did not provide any detailed guidance for fiscal 2021 owing to the pandemic, its actions to lower promotional activity and improve Average Unit Retail or AURs across brands as well as disciplined expense management helped the company see the third successive quarter of operating income growth.

Margin Discussions

Consolidated adjusted gross profit came in at \$912 million, up 26.7% from the year-ago period. Also, adjusted gross margin expanded 450 basis points (bps) to 71.6% owing to lower and more disciplined promotional activity. Further, the company reported adjusted operating income of \$183 million versus adjusted operating loss of \$32 million reported in the year-ago period. Also, adjusted operating margin improved to 14.4% from operating margin of (2.9)% in the prior-year period.

We note that adjusted SG&A expenses declined 3.1% to \$729 million, reflecting cost-containment efforts and the earlier announced actions to transform the company's operating model. Again, as a percentage of net sales, adjusted SG&A contracted to 57.3% from 70.1% recorded in the year-earlier quarter.

Segment Details

Net sales for Coach came in at \$963.5 million, up 24.9 % year over year. Gross margin for the segment expanded 490 bps to 74.5% driven by lower levels of promotion and higher IMUs, resulting in higher AUR. We note that adjusted operating margin increased to 28.7% from 15.1% in the year-ago quarter. The brand registered triple-digit increase in digital sales.

Kate Spade sales came in at \$252.4 million, up 1% from the year-ago period. Adjusted gross margin for the segment increased 150 bps to 63.5% courtesy of strategic pullback in lower-margin disposition sales along with lower levels of promotional activity in North America. The segment reported adjusted operating margin of 4.6% versus an operating margin of (6.9)% recorded in the year-ago quarter. The brand

Past performance is no guarantee of future results. Please see important disclosures and definitions at the end of this report.

witnessed about 50% increase in digital sales.

Net sales for **Stuart Weitzman** totaled \$57.4 million, up 11.8% year over year. The segment's adjusted gross margin improved 420 bps to 58.9%, reflecting a tailwind from FX as well as a geographic mix benefit due to the strong growth in the high-margin China business. The company reported adjusted operating loss of \$8 million compared with an operating loss of \$35 million in the year-ago quarter. The brand registered more than 50% increase in digital sales.

Store Update

At the end of the quarter, the company operated 357 Coach stores, 211 Kate Spade outlets and 49 Stuart Weitzman stores in North America. Internationally, the count was 587, 202 and 54 for Coach, Kate Spade and Stuart Weitzman, respectively.

The company remain on track to improve its operating model by streamlining organizational structure and optimizing global fleet, with 49 net closures year-to-date (including 31 net closures in the third quarter), representing a net decrease of 94 stores from the prior year.

Other Financial Details

Tapestry ended the quarter with cash, cash equivalents and short-term investments of \$1,659.2 million, long-term debt of \$1,590 million and stockholders' equity of \$3,015 million. The company generated free cash flow of \$179 million during the quarter and \$876 million year-to-date. The company utilized free cash flow to pay down the remaining \$200 million balance on revolver at the beginning of the quarter.

During the quarter, the company incurred capital expenditures of \$19 million, reflecting a year-over-year decline of about 62%. Management expects to incur capital expenditures of approximately \$100 million during the fiscal year 2021.

Outlook

Given stronger-than-expected results in the first nine months and anticipations of sustained recovery, Tapestry now envisions fiscal 2021 revenue to improve at a mid-teens rate on both a 52 and 53-week basis. This includes the expectation for fourth-quarter sales to increase roughly 110% (on a 13-week basis). The final quarter also include the impact of one extra week, which is likely to contribute about \$100 million in incremental sales.

The company anticipates operating income and earnings per share to increase compared with fiscal 2019 on a 52 and 53-week basis.

Management continues to envisions significant gross margin expansion for the fiscal year owing to lower promotional activity and higher AURs. For the fourth quarter, management expects moderate gross margin pressure compared to prior year due to geographic mix headwinds, as the company anniversaries the atypical comparison due to COVID-19.

Tapestry estimates more than 40% increase in SG&A expenses during the fourth quarter (on a 13-week basis) on account of increased investments, notably in marketing as well as the impact of lapping depressed expense levels from a year ago as a result of the pandemic, which included the benefit from the cancellation of the annual incentive plan.

Zacks Equity Research www.zackspro.com Page 8 of 19

Valuation

Tapestry shares are up 39.9% in the year-to-date period and nearly 225.7% over the trailing 12-month period. Stocks in the Zacks sub-industry are up 33.8%, while the Zacks Retail-Wholesale sector is up 1.1% in the year-to-date period. Over the past year, the sub-industry and the sector are up 178.3% and 23%, respectively.

The S&P 500 index is up 15.6% in the year-to-date period and 44.6% in the past year.

The stock is currently trading at 14.16X forward 12-month earnings, which compares to 20.94X for the Zacks sub-industry, 28.17X for the Zacks sector and 21.82X for the S&P 500 index.

Over the past five years, the stock has traded as high as 22X and as low as 4.51X, with a 5-year median of 15.15X. Our Neutral recommendation indicates that the stock will perform in-line with the market. Our \$46 price target reflects 15.01X forward 12-month earnings.

The table below shows summary valuation data for TPR

Valuation Multiples - TPR						
		Stock	Sub-Industry	Sector	S&P 500	
	Current	14.16	20.94	28.17	21.82	
P/E F12M	5-Year High	22	89.35	33.84	23.83	
	5-Year Low	4.51	8.38	19.06	15.31	
	5-Year Median	15.15	14.61	23.86	18.05	
	Current	2.05	1.3	1.33	4.75	
P/S F12M	5-Year High	2.96	1.3	1.4	4.75	
	5-Year Low	0.49	0.34	0.84	3.21	
	5-Year Median	1.97	0.83	1.02	3.72	
	Current	8.4	9.44	12.95	17.23	
EV/EBITDA F12M	5-Year High	11.65	10.24	13.08	18.83	
	5-Year Low	3.37	3.89	8.76	13.04	
	5-Year Median	8.24	6.32	11.24	15.92	

Zacks Equity Research www.zackspro.com Page 9 of 19

Industry Analysis Zacks Industry Rank: Top 21% (52 out of 252)

····· Industry Price Industry - Price 55 600 45 500 35 400 30 25 300 20 15 200 10 Source: Zack Investment Research 2019 2020 2021

Top Peers

Company (Ticker)	Rec R	ank
Guess, Inc. (GES)	Outperform	1
L Brands, Inc. (LB)	Outperform	2
The Childrens Place, Inc. (PLCE)	Outperform	1
Urban Outfitters, Inc. (URBN)	Outperform	1
American Eagle Outfitters, Inc. (AEO)	Neutral	3
Burberry Group PLC (BURBY)	Neutral	3
Capri Holdings Limited (CPRI)	Neutral	3
Levi Strauss & Co. (LEVI)	Neutral	3

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

Industry Comparison Industr	Industry Peers					
	TPR	X Industry	S&P 500	CPRI	LB	LEVI
Zacks Recommendation (Long Term)	Neutral	-	-	Neutral	Outperform	Neutral
Zacks Rank (Short Term)	2	-	-	3	2	3
VGM Score	В	-	-	В	В	В
Market Cap	12.12 B	1.46 B	30.37 B	8.51 B	20.01 B	10.96 B
# of Analysts	9	4	12	8	9	4
Dividend Yield	0.00%	0.00%	1.33%	0.00%	0.83%	0.88%
Value Score	С	-	-	Α	Α	В
Cash/Price	0.14	0.13	0.06	0.03	0.14	0.19
EV/EBITDA	-38.17	6.26	17.25	16.38	10.99	207.62
PEG F1	1.54	1.60	2.09	0.85	0.96	NA
P/B	4.02	4.30	4.15	3.94	NA	7.78
P/CF	23.11	18.46	17.53	10.31	13.44	45.36
P/E F1	15.36	17.93	21.20	15.04	12.48	24.71
P/S TTM	2.50	0.83	3.42	2.10	1.51	2.58
Earnings Yield	6.51%	4.03%	4.61%	6.65%	8.01%	4.06%
Debt/Equity	0.53	0.00	0.66	0.57	-10.03	0.90
Cash Flow (\$/share)	1.88	0.85	6.86	5.46	5.38	0.60
Growth Score	С	-	-	С	В	Α
Historical EPS Growth (3-5 Years)	-7.93%	-6.51%	9.59%	-16.45%	-9.72%	NA
Projected EPS Growth (F1/F0)	191.53%	114.59%	21.79%	96.91%	67.34%	427.38%
Current Cash Flow Growth	-48.91%	-44.61%	1.02%	-47.04%	-23.13%	-53.70%
Historical Cash Flow Growth (3-5 Years)	-6.40%	-4.43%	7.28%	-4.29%	-1.33%	NA
Current Ratio	2.24	1.66	1.39	0.95	1.72	1.59
Debt/Capital	34.53%	15.23%	41.51%	36.11%	NA	47.30%
Net Margin	7.03%	1.96%	12.06%	-1.53%	10.73%	-3.23%
Return on Equity	20.85%	9.75%	16.59%	13.31%	-137.83%	4.86%
Sales/Assets	0.60	1.14	0.51	0.53	1.20	0.74
Projected Sales Growth (F1/F0)	13.33%	23.26%	9.56%	24.16%	21.61%	24.35%
Momentum Score	В	-	-	D	F	D
Daily Price Change	1.05%	0.21%	0.33%	1.33%	0.18%	1.82%
1-Week Price Change	5.61%	7.69%	2.74%	7.63%	15.12%	11.35%
4-Week Price Change	-3.14%	4.44%	1.82%	-0.79%	3.43%	2.28%
12-Week Price Change	5.97%	15.53%	6.49%	13.93%	16.94%	15.53%
52-Week Price Change	246.45%	167.17%	42.26%	291.51%	421.43%	123.43%
20-Day Average Volume (Shares)	3,091,113	304,011	1,881,795	1,476,025	4,312,155	1,613,208
EPS F1 Estimate 1-Week Change	-0.11%	0.00%	0.00%	0.00%	0.00%	0.00%
EPS F1 Estimate 4-Week Change	0.63%	2.84%	0.02%	1.23%	0.00%	0.00%
EPS F1 Estimate 12-Week Change	10.75%	18.97%	3.59%	5.66%	27.59%	14.77%

EPS Q1 Estimate Monthly Change 1.35% 0.93% 0.00% 0.51% 0.00% 0.00%

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.

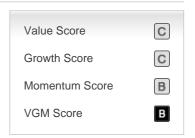
Zacks Rank

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.



As an investor, you want to buy stocks with the highest probability of success. That means buying stocks with a Zacks Recommendation of Outperform, which also has a Style Score of an A or a B.

Disclosures

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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 mediumterm 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 4week 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 longterm 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 mostrecent 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

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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.						
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Zacks Equity Research www.zackspro.com Page 14 of 19

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. Past performance is no guarantee of future results. Please see important disclosures and definitions at the end of this report.

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 a 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 the same for its industry.	require higher debt to fir	nance their operations.	So, a company's debt-	o-capital ratio should b	e compared with

Zacks Equity Research www.zackspro.com Page 18 of 19 **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.