TAG® TELSEY ADVISORY GROUP

INDUSTRY UPDATE

SEPTEMBER 30, 2019

WEEKLY HIGHLIGHTS

Retail & Restaurants

Technology Update

Stock Price Performance - Last Week

INDEX/STOCK	WTD	YTD
Indices Performance:		
> DJII	(0.4%)	15.0%
> S&P 500	(1.0%)	18.1%
> SP421	(1.6%)	19.4%
> S&P Retail XRT	0.5%	2.5%
> Advertising	0.5%	5.0%
> Apparel	4.4%	21.3%
> Cosmetics	4.6%	25.4%
> Department Stores	7.7%	11.3%
> Discounters	(0.4%)	27.9%
> Footwear	2.4%	(3.3%)
> Gaming	(4.7%)	13.9%
> Hardlines	3.4%	9.8%
> Luxury	0.9%	(1.2%)
> Off-Pricers	1.2%	25.3%
> Online Travel	(2.9%)	15.1%
> Restaurants	(5.8%)	5.0%
> Specialty Apparel	1.2%	(9.0%)
> Sporting Goods	3.9%	17.6%
> Supermarkets	0.2%	(6.4%)
Best Performing Stocks:		
> GME	13.6%	(57.7%)
> CHS	13.3%	(28.8%)
> MIK	11.9%	(28.4%)
> SIG	8.7%	(45.0%)
> URBN	8.2%	(21.1%)
Worst Performing Stocks:		
> ASNA	(13.8%)	(90.0%)
> GO	(9.8%)	NA
> JCP	(5.3%)	(13.5%)
> PRTY	(4.7%)	(43.1%)
> AMZN	(3.8%)	14.9%

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Looking Ahead - September 30

BIG PICTURE THEMES

Technology is revolutionizing the retail and customer experience. In the future, its applications will only become more extensive for both the consumer and the operations of digital and physical commerce. The goal is to offer convenience and speed so that consumers recapture their time and businesses become smarter and more efficient. Overall, physical store employees should have more time and more knowledge of their offering to engage with shoppers rather than spend their time executing tasks.

Retail

Retailers: Retail has been one of the sectors that is most engaged with digital transformation and some of the trends that are now being incorporated into business models as a result include:

> **Robotics:** Robots have the ability to become fulfillment center employees to help sort merchandise, assist in store operations to track what is missing and misplaced on shelves; all with the purpose of managing in-stock positions and automating inventory management to enhance the assortment, reduce order fulfillment times, and increase margins.

> **Automated Checkout:** Scan and go technology frees up space in store to allow for merchandise sales and reduced labor costs.

> **Endless Aisle:** Many retailers are using handheld devices such as iPads to assist customers with finding inventory availability either in-store or online with the ability to ship any items not available in store. For example, Macy's is giving its associates handheld devices that enable them to determine the best route to take when stocking inventory.

> **CRM:** New CRM platforms, in conjunction with expanded loyalty programs, allow for more efficient and targeted marketing messaging, which can also support gross margin improvement.

> **Dynamic Pricing and Promotion:** Many retailers have implemented new inventory management tools such as markdown and size optimization, which can contribute to improved profitability and productivity as the algorithms and data sets season. Data allows retailers to determine when is best to raise or lower pricing in real time given demand, evaluate buying patterns, determine inventory availability, and monitor competitive pricing.

> **Voice Commerce and Payments:** Voice commerce is expected to generate $40B in sales by 2022 in the US. It is estimated that Amazon Echo users spend 66% more than the average consumer. Voice enabled payments should grow in popularity, given its convenience and ease.

> **Loss Prevention and Fraud Detection:** In-store cameras track facial recognition to help catch shoplifters and artificial intelligence benefits the online store by detecting fake buyers and other fraudulent activity, hopefully, before it occurs. For example, J.C. Penney is investing in loss prevention technology.

> **AR and VR:** Retailers are now integrating mobile technology to simplify the shopping process. They are incorporating augmented and virtual reality to allow consumers the ability to visualize merchandise. They also include virtual inventory.

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> **In-Store Experiences:** As a part of its focus on baseball, Dick's Sporting Goods continues to roll out HitTrax batting cages, which are now available in 170 stores. These cages allow customers to test a baseball bat on a stationary baseball, with the simulation technology providing key stats, such as launch angle, exit velocity, distance, and others. Upon testing several bats, HitTrax produces a bat fitting report that compares the performance of each baseball bat, helping shoppers pick the ideal option. In addition, these cages allow customers to play games and compete with one another. HitTrax batting cages provide an experiential shopping journey and should be a good traffic driver.

> **In-Home Purchasing Tools:** Buying shoes online can be a hurdle for many customers, as it's hard to predict what size to pick. To address this issue, Nike started rolling out a new tool in May across the US, namely Nike Fit. This tool, which will be available on the Nike app and in stores, allows customers to scan their foot by using smartphone cameras and see their ideal size for a given shoe. To accurately predict a customer's shoe size, Nike Fit captures a customer's foot morphology and collects 13 data points by using a combination of computer vision, data science, machine learning, AI, and recommendation algorithms. Surprisingly, the company estimates nearly 60% of shoppers purchase the wrong shoe size. Nike Fit should solve this problem, enhance the shopping experience, and fuel footwear purchases in mobile, which has been Nike's fastest growing DTC channel.

Shopping Centers: Shopping centers are investing in technology to enhance the shopping experience with:

> **Robot Assistants:** answer shopper questions and assist with general information.

> **Beacon Technology:** personalize the shopping experience; sending targeted messages to shoppers' smartphones.

> **Parking Sensors:** ability to find parking more quickly by displaying open spaces.

> **Facial Recognition:** software combined with artificial intelligence to determine shopping center traffic patterns and customer reaction to displays and marketing.

> **Shopping Center Apps:** help with directions, directories, and special offers.

With these actions being no longer a nice to have, but a must have, the percentage of capital spending that is allocated to technology will continue to at least be maintained on average at around 40% of capital spending plans. The iterations will continue to evolve, and ultimately, the beneficiaries should be both the consumer and the business—seamless efficiency and satisfaction being the end goal, resulting in higher sales and profits.

Restaurants

The restaurant industry has continued to witness an accelerating level of technology investment and integration, especially among the Industry's larger, better-capitalized chains. We believe that the economies of scale for these larger chains enables them to use technology as a point of differentiation vs. less technologically savvy smaller chains, helping them to continue to pressure and take share from these smaller chains. The Industry's expanding use of technology is filtering throughout the consumers' restaurant experience both on-site and off-premise, typically enabling companies to capture customer profile and purchase data for use in understanding its customer and in future marketing efforts. That increasing level of technology utilization is filtering into better consumer access and convenience; a more consistent consumer experience; and ultimately helping to further boost both sales and profits.

The use of technology as a point of differentiation is expanding through every segment of the Restaurant Industry, whether Fast Food, Fast Casual and Casual Dining.

Fast Food: McDonald's (MCD) continues to raise the bar on most every chain in the Industry, utilizing its strong balance sheet and systemwide scale to invest heavily in technology in ways to both grow sales and control costs. In the past twelve months, the company has sustained its substantial technology investments including its purchase of Dynamic Yield and investment in Plexure, assisting in its roll-out of artificial intelligence (AI) in conjunction with its US digital menu boards. Those and many of the company's prior investments are beginning to filter into improving consumer convenience and speed of service in its drive-thrus; helping control labor costs in order placement and kitchen production; and providing a more convenient, frictionless McDonald's experience.

Fast Casual: Since CEO Brian Niccol joined the company in early 2018, Chipotle Mexican Grill (CMG) has been playing catch-up in its use and adoption of technology throughout its fast casual system. Those efforts appear most notable in providing better consumer access, convenience, and frictionless order placement and pickup. The fruit from those investments is apparent in its dramatically improving same-store sales trends and accelerating digital sales. During its previous 2QF19 (Jun), its same-store sales increased 10% while its digital sales grew 99% to 18.2% of its total sales. The company's technology investments are also showing up in its digitalized second-make table production systems (currently in >90% of its system) which seamlessly receive customer orders, which are then processed and pushed to its rapid pickup shelves for convenient customer pickup, 3rd party delivery or catering.

Casual Dining: Brinker Intl. (EAT) has been at the forefront of the Industry's technology usage for well over a decade now. Dating back to its Kitchen of the Future investments, management has long sought ways to bring operating efficiencies to its business to both control its operating expenses and boost its sales. In recent years, those investments have shifted to be better-informed about its broad customer base, how best to reach its various customer niches within that base, and how to most successfully serve and market to its base. Capturing that information has evolved, utilizing especially its My Chili's Rewards program to capture customer profiles, demographic info and purchase history. Its use of its on-table kiosks allows Chili's customers to order incremental menu items, quick easy payment and almost instantaneous feedback to management on the experience it provided to its guests.

ADDENDUM
Important Disclosures:

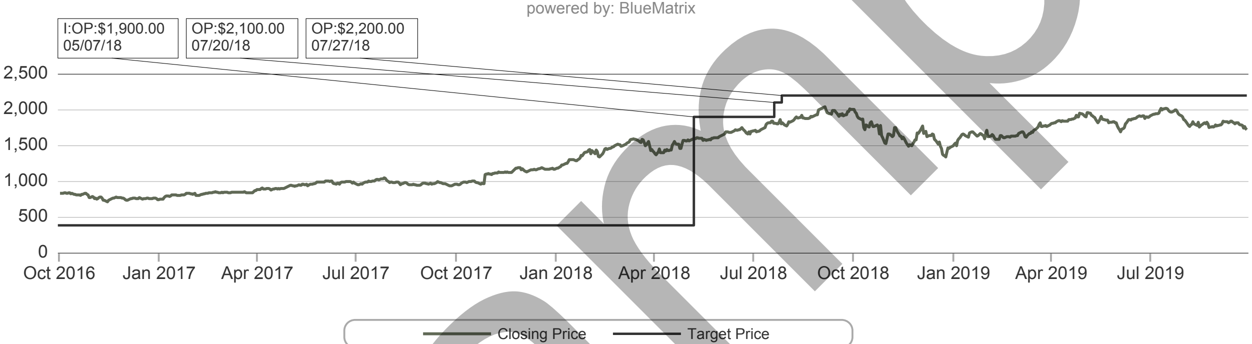
Valuation Method for Target Price: Price-to-Earnings, enterprise-value-to-EBITDA, P/E to growth, price to free cash flow, and discounted cash flow analysis.

Investment Risks: Telsey Advisory Group's (TAG's) equity research department covers consumer-focused sectors including apparel manufacturers, cannabis, children's and teen retailers, consumer electronics retailers, cosmetics, department stores, discounters, footwear, home furnishings retailers, home improvement retailers, internet, luxury goods, office supply retailers, off-price retailers, restaurants, specialty apparel retailers, sporting goods retailers, and supermarkets. Risks across or specific to one or more of these sectors include volatility of commodity costs, consumer spending, currency, rising interest rates, weaker consumer confidence and unemployment rates. Additionally, access to capital, supply chain disruptions, commodity costs, private label distribution, currency, geopolitical uncertainty, unfavorable government regulations, lack of appropriate real estate sites, and the use of the World Wide Web to sell merchandise represent unique industry risks.

Analyst Certification
The Research Analysts, Dana Telsey, Joseph Feldman, Bob Derrington and Cristina Fernández, CPA, who prepared the research report hereby certify that the views expressed in this report accurately reflect the Analyst(s) personal views about the subject companies and their securities. The Research Analyst(s) also certify that the Analyst(s) have not been, are not, and will not be receiving direct or indirect compensation for expressing the specific recommendation(s) or view(s) in this report.

Company Specific Disclosures

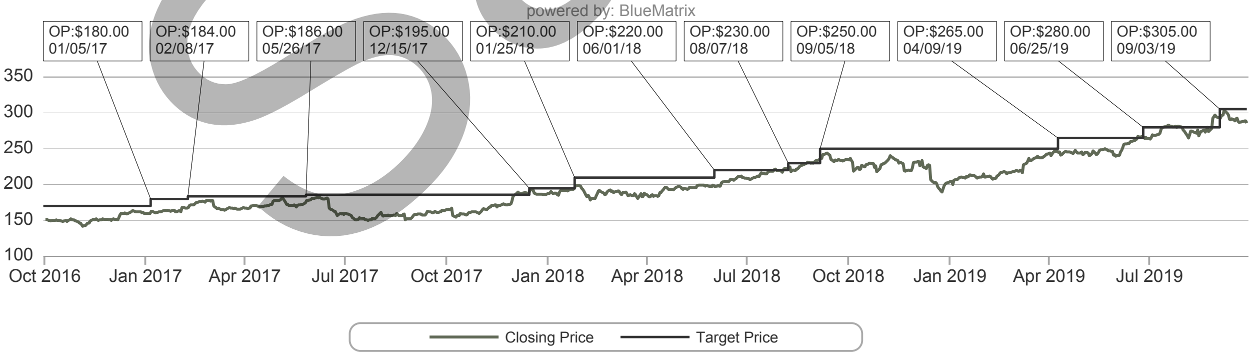
Amazon.com, Inc. Rating History as of 09/27/2019



On September 16, 2012 TAG completed a transition from price target ranges to specific price targets. All price target changes prior to September 16, 2012, are displayed as price target averages.

* Telsey with ratings are effective as of 09/11/14

Costco Wholesale Corp. Rating History as of 09/27/2019



On September 16, 2012 TAG completed a transition from price target ranges to specific price targets. All price target changes prior to September 16, 2012, are displayed as price target averages.

* Telsey with ratings are effective as of 09/11/14

The Kroger Co. Rating History as of 09/27/2019

On September 16, 2012 TAG completed a transition from price target ranges to specific price targets. All price target changes prior to September 16, 2012, are displayed as price target averages.

* Telsey with ratings are effective as of 09/11/14

Target Corp. Rating History as of 09/27/2019

On September 16, 2012 TAG completed a transition from price target ranges to specific price targets. All price target changes prior to September 16, 2012, are displayed as price target averages. Exception listed for 08/16/2012

* Telsey with ratings are effective as of 09/11/14

Walmart Inc. Rating History as of 09/27/2019

On September 16, 2012 TAG completed a transition from price target ranges to specific price targets. All price target changes prior to September 16, 2012, are displayed as price target averages.

* Telsey with ratings are effective as of 09/11/14

Ratings Distribution & Investment Banking Disclosure

Rating	Count	Ratings Distribution	Count	*Investment Banking
OUTPERFORM	**30**	**38.46%**	**2**	**6.67%**
MARKET PERFORM	**47**	**60.26%**	**0**	**0.00%**
UNDERPERFORM	**1**	**1.28%**	**0**	**0.00%**

On 09-11-2014 TAG launched a three-tiered rating system of Outperform, Market Perform, and Underperform to evaluate its stocks under coverage. Price targets continue to be used in conjunction with the new rating system.

Ratings Definition and Distribution

Our recommendation system is based on a stock's expected total return relative to the industry universe over the next 12 months.

We divide stocks under coverage into three categories, each defined by a prospective rate of return:

Outperform – the stock is expected to outperform the average total return of the industry universe over the next 12 months.

Market Perform – the stock is expected to perform in line with the average total return of the industry universe over the next 12 months.

Underperform – the stock is expected to underperform the average total return of the industry universe over the next 12 months.

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