



Walmart (WMT)

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Introduction

A once seemingly stagnating dinosaur, Walmart Inc. has overcome its 'trashy' reputation as an alternative for low-income families, to a company offering products of great value. Walmart is one of the largest global retailers in the world which engages in both the retail and wholesale businesses. In addition to these revenue streams, Walmart relies heavily on its grocery division and is expanding in e-commerce. According to Fortune Global 500, Walmart is the world's largest company by revenue. But if recent history has taught us anything, it's that the rich get richer. The company operates under three main segments, which include Walmart U.S., Walmart International, and Sam's Club. Walmart runs under the Everyday Low Prices (EDLP) and Everyday High Convenience (EDHC) business models, which focus on optimizing customer experience with unbeatable, affordable prices. These strategies have led Walmart to its big-time resurgence and a promising future.

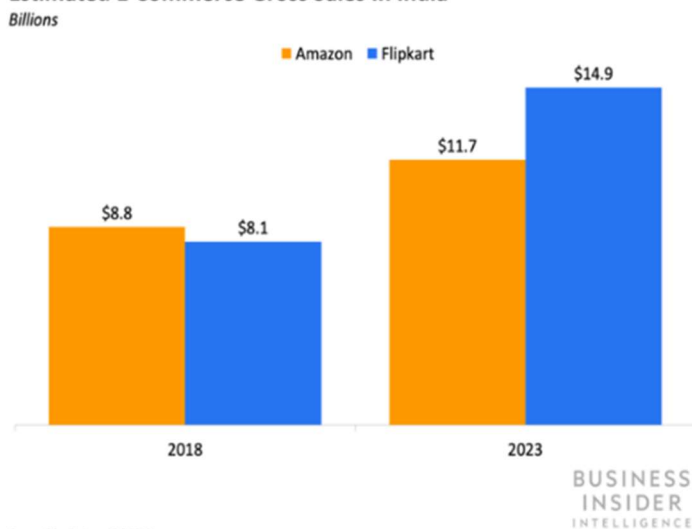
Recommendation

With chatter of a possible impending recession, one might advocate for an increase in holdings of a defensive stock such as Walmart. However, by investing in Walmart, our research suggests the portfolio will receive the best of worlds: at worst, a safe defensive investment; at best, a stock with booming growth potential. Walmart would expose the portfolio to the grocery and wholesale businesses as well as expand its position in retailing and e-commerce.

Investment Thesis

Global Expansion: Walmart has been actively expanding into global markets by acquiring international businesses over the years. It now has stores in Canada, China, India, Japan, Mexico and the United Kingdom. Understanding that it is currently in the late stages of the business cycle in the United States, Walmart International is looking to further expand in emerging markets like China and India. It has explored new opportunities in their international operations to further increase the capabilities of these businesses. Walmart recently acquired Flipkart, an established ecommerce company in India. Flipkart currently has about 39% market share in India's e-commerce industry and about 100 million registered users. Flipkart is also in talks to buy grocery chains in order to expand into online grocery. Recognizing the emerging e-commerce market in India, this acquisition will enable Walmart to grow its Walmart International segment, which currently only accounts for 24% of their revenue. By 2022, the internet penetration is expected to double to 60% in India, and the Indian middle class will grow to become the largest segment of its population. Therefore, acquiring one of the largest ecommerce businesses in India will make Walmart one of the leaders in the emerging market. On the other hand, Walmart has also been simplifying its international businesses that are not performing as well. In June 2018, Walmart had divested 80% of its Brazilian business, which was underperforming. We believe that with Walmart International being deliberate about where and how they operate, they will successfully create long-term sustainable and profitable growth.

Estimated E-Commerce Gross Sales In India



Innovation: Walmart has always been customer-centric and has striven to incorporate innovative approaches to further improve customer experience. In 2017, Walmart launched their technology incubator, Store No. 8 in efforts to transform the future of retail. As of 2019, they have introduced three portfolios which include Jetblack, Spatial&, and Intelligent Retail Lab. They are experimenting the possibilities of expanding into conversational commerce with Jetblack. Jetblack is a courier-based personal shopping service which combines the convenience of e-commerce with the customized attention to its members. It uses an Artificial Intelligence

system to learn customers preferences and give recommendations accordingly. Currently, the company still heavily relies on its human agents to run the business. However, their responses are used to train the AI system that could someday power an automated personal-shopping service. Furthermore, they have also made huge progress on their omni-channel offerings which include their grocery pickup and delivery service. They are currently still expanding their omni-channel investments and piloting new approaches like Spark, which is their crowd-sourced delivery platform in their efforts to further expand their coverage area for delivery. We believe that Walmart's innovative spirit will lead and transform the future of retail.

E-Commerce: Usually shopping sprees are for consumers, but Walmart has been on a shopping spree of its own by acquiring several online retailers in order to maintain its spot as the nation's top online apparel retailer. Some of Walmart's major acquisitions include:

- Jet.com (2016) – E-commerce retailer for urban millennials
- Shoebuy (2016) – Footwear
- Bonobos (2017) – Men's apparel
- Modcloth (2017) – Women's apparel
- Moosejaw (2017) – Outdoor apparel
- Art.com (2018) – Home accessories
- Bare Necessities (2018) – Women's intimates
- Eloquii (2018) – Plus-size fashion

Walmart has also been aggressive in expanding its online clothing offerings. It launched four separate private fashion labels in 2018 and partnered with celebrities such as Ellen Degeneres, Sofia Vergara, and Elizabeth Stewart. In addition, it made major exclusive deals with fashion retailers Maurices and Lord & Taylor by offering their clothing at Walmart.com.

Plus, Walmart has recently surpassed major competitor Amazon in the online grocery business. By allowing customers to shop for groceries online and pick them up ready to go in store for free, online grocery has been Walmart's fastest growing online segment. For a company whose grocery sales account for 55% of its revenue, this emerging and growing market is an exciting time. Other changes to Walmart's e-commerce experience include website and mobile redesigns. New innovative app features include being able to calculate a shopping list price total before shopping in store and having a virtual assistant to guide customers towards their next product.

In response to Amazon's recent announcement about one day shipping for Prime subscribers, Walmart tweeted out that it may have a surprise in store for us: one day shipping without a subscription fee. Walmart's CEO, Doug McMillon, hinted in October 2018 that Walmart is well positioned for free same-day delivery for its online sales; Walmart has an enormous advantage over its competitors in this area by having a Walmart or Sam's Club store within 10 miles of 90% of the U.S. population. We believe that Walmart's 2018 online sales growth of 39% will continue to remain at similar levels for years to come due to their investments in online fashion retail, online grocery, and online customer experience.

Peer Analysis

Often times, selecting financial data to compare companies with each other can be rather arbitrary. As such, we chose to compare Walmart against its peers with mathematically determined important variables. To accomplish this endeavor, we implemented a random forest analysis. A random forest is a machine learning technique used to predict quantitative or qualitative variables with a set of predictor variables. Random forests output variable importance scores, which are quite useful for determining associations between variables. They are highly regarded among the statistics and data analytics communities for their accuracy and ability to predict values, without the issues typically affiliated with regression. In fact, random forests have been used in several peer-reviewed scholarly research publications for stock market predictions.

In our case, we predicted percentage change in stock price with 79 financial metrics. We did this with 20 years of quarterly financial data for Walmart and its peers, constructing the random forest in R programming. The peer group and its mathematically determined most important financial metrics are presented below:

	Walmart	Amazon	Target	Kroger	Costco	CVS
Price/Sales	0.55	3.22	0.50	0.19	0.73	0.35
EV/Sales	0.65	3.20	0.66	0.30	0.72	0.78
ROA	3.15%	6.85%	7.30%	8.04%	8.12%	-0.41%

The three financial metrics presented above were each independently determined more important than the 76 other financial metrics combined. Each value presented is based on fiscal year 2018. It is important to note that Walmart is a cheaper stock than its main competitor, Amazon. Historically, Walmart's ROA has ranged from 7-9%, but has dipped in the past three years due to increased expenses associated with their investment and expansion activity.

Valuation

Our valuation is dependent upon our peer analysis. For our first valuation model, we wanted to use a multiples valuation method with the important variables from our peer analysis section. Given that the three variables' importance scores were roughly equal, we decided to weight them equally. This method gave us a target price of \$151.70.

For our second valuation model, we used a 5-year DCF model based on projected free cash flows. Although the target growth rate suggested by Walmart is between 2.5% to 3.5%, we decided to use a relatively conservative approach by using a lower perpetuity growth rate at 2.3% to take into account a possible economic downturn, and resulted with a target price of \$134.33. A sensitivity analysis and a visual of our valuation is presented below:

Value in USD						Valuation	
	1.8%	2.3%	2.8%	3.3%	3.8%		
5.8%	156.18	177.21	205.06	243.65	300.70	EV/S	172.57
6.3%	136.99	153.14	173.79	201.11	238.98	P/S	165.49
6.8%	121.59	134.33	150.17	170.44	197.25	ROA	117.03
7.3%	108.96	119.22	131.72	147.28	167.16	Multiples Approach (30%)	151.70
7.8%	98.41	106.83	116.90	129.17	144.44	DCF @ 2.3% growth (70%)	134.33
						Target Price	139.54
						Potential Upside	36.2%

We decided to weight the DCF model at 70% and our multiples approach valuation model at 30% to have a more conservative valuation. This resulted in \$139.54 as our target price, having a potential upside of 36.2% from May 6th's closing price.

Risks

Current Economic Conditions: Although Walmart is a relatively stable company, economic conditions and factors might cause adverse effects on Walmart's profitability. The recently inverted yield curve may be signaling an economic downturn. Despite this, Walmart has the ability to do well during a recession. During the economic crisis in 2008, Walmart was outperforming the S&P 500 and EPS remained high. With that being said, Walmart is a safety stock, which goes in line with being a consumer staple. With less than a third of products being sourced by China, Walmart is less susceptible to tariffs that might result from the trade war. It is also notable that Walmart's margins are susceptible to other market factors such as rising wage pressures and fluctuations in gasoline prices.

Competition: Being a retailer, all of Walmart's business segments face high competition in pricing and overall shopping experience. Customer loyalty is no longer as enticing to consumers with an ever increasing number of options from which to choose. Higher prices, a negative stigma, a poor experience, and physical location could all lead customers away from Walmart. However, it is increasingly easier to choose Walmart. Walmart has always been a leader on price, using the everyday low prices (EDLP) business model. Being such a large-scale retailer, Walmart enjoys the benefit of economies of scale. Hence, it has the competitive advantage of providing the lowest prices in the market. Walmart has promised to keep prices as low as it can, for as long as it can. It has also been increasing its investments in improving their omni-channel offerings to improve overall shopping experience.

Legal and Regulatory Constraints: In 2019, Walmart International operations contributed to approximately 24% of Walmart's net sales. This means that almost one quarter of their revenue streams are exposed to foreign legal and regulatory constraints. In February, the Indian government introduced a new FDI policy that affects e-commerce in India. This new regulation bans e-commerce companies like Flipkart from selling products from companies in which they have an equity interest. Walmart has responded to the implementation of this new law by assuring that it will still reach its previously announced estimated EPS, as it is projected that that this change will not significantly affect the company. Walmart is also confident that growth from its other segments will more than offset the negative impacts from this change.

Management

CEO: Doug McMillon (2014 - present)

- Walmart associate in high school, returned to Walmart after earning his MBA
- Sam's Club CEO (2005 - 2009)
- Walmart International CEO (2009 - 2014)
- In 2015, quoted by CNBC as owning all his investments in Walmart

A lifelong Walmart employee, McMillon has dedicated himself towards improving the company. McMillon has had a track record of success at his various positions within Walmart. As Sam's Club CEO, he stole market share from Sam's Club's main wholesale competitor, Costco, by appealing to small businesses. During his time as Walmart International CEO, he led Walmart's international transformation by nearly doubling their number of stores outside the U.S. At the ripe age of 52, it is unlikely McMillon jumps ship anytime soon.

Management & Board

- 49 total members
- Average age of 52 years
- Average tenure of 7 years
- Incentive-based compensation

Walmart's management and board come from a variety of backgrounds and have a plethora of business and leadership experience. With an experienced, relatively young foundation and a vision towards the future, Walmart's management and board is poised to capitalize on future consumer trends.

Stock Chart



Ownership

