

Wal-Mart Stores, Inc. WMT

RETAIL STORES

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COMPANY REPORT

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Steady returns with prospects for growth

Digital retail holds the company's growth opportunities

We initiate our Walmart's coverage with a **BUY recommendation** given our FY 2018 weighted average price target of 127.9 dollars per share, corresponding to an overall upside of 30% compared to the current price. We believe the market is underestimating Walmart's tremendous growth opportunities.

The company outlook for the future is better than expected, according to our forecast, for which we estimate a target price of \$127.9, well above the actual price of \$98.57 for January 2018. We used a forecasting-based valuation method for each business segment, in which we made some critical assumptions, such as a constant perpetual growth for each from 2027 onwards. In order to strengthen our recommendation we also did a multiples valuation using P/E. The average multiples valuation was higher than our prediction for the equity value, consolidating our recommendation to BUY WMT. The future outlook for Walmart is mainly characterized by trends like: Walmart's hypermarkets becoming even more efficient and valuable in sparsely populated rural areas with few retail options, increasing sales; Investment in smaller format supermarkets, more in line with modern preferences boosting performance; Online Sales will grow, but essentially through expensive acquisitions and therefore not increasing the value of the firm substantially; Internationally there is a need to find new partners in order to have a sustainable performance, since the market is extremely competitive and they don't have the same brand power as in the US.

Recommendation: BUY

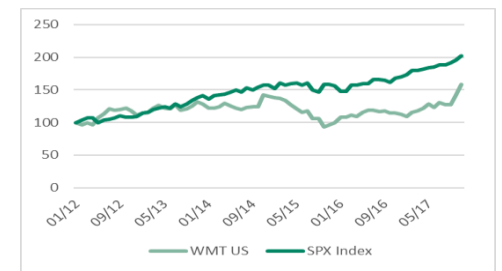
Price Target YE17: 127.9 \$

Price (as of 3-Jan-18) 98.56 \$

Bloomberg: WMT

52-week range (\$)	65.28-100.13
Market Cap (\$m)	294,875
Outstanding Shares (m)	2,987

Source: Bloomberg



Source:

(Values in \$ millions)	2016	2017E	2018F
Revenues	485,873	488,528	491,079
EBITDA	29,178	30,928	30,852
Net Income	14,293	15,738	15,663
EPS (\$)	4.4	4.	4.8
EBITDA margin (%)	6.0	6.3	6.3
Operating margin (%)	4.7	5.1	5.1

Source:

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Executive summary

Walmart DCF Valuation

(\$ millions)

Free Cash Flows Calculation

	FY 2016 A	FY 2017 A	FY 2018 E	FY 2019 E	FY 2020 E	FY 2021 E	FY 2022 E	FY 2023 E	FY 2024 E	FY 2025 E	FY 2026 E	FY 2027 E
Total Revenue	482,130	485,873	488,528	491,079	493,967	496,979	499,938	502,824	506,026	509,236	512,388	515,499
YoY Growth-%	-0.7%	0.8%	0.5%	0.5%	0.6%	0.6%	0.6%	0.6%	0.6%	0.6%	0.6%	0.6%
EBIT	24,105	22,764	24,925	24,817	24,680	24,983	25,397	25,500	25,675	25,919	26,145	26,318
EBIT margin	5.0%	4.7%	5.1%	5.1%	5.0%	5.0%	5.1%	5.1%	5.1%	5.1%	5.1%	5.1%
Operating Taxes	-7,304	-6,897	-8,614	-8,576	-8,528	-8,634	-8,779	-8,815	-8,876	-8,962	-9,040	-9,101
NOPLAT	16,801	15,867	16,312	16,241	16,153	16,349	16,618	16,685	16,799	16,958	17,104	17,217
Depreciation & Amortization	9,454	10,080	9,267	9,317	9,360	9,420	9,487	9,554	9,622	9,706	9,791	9,877
Capex	-11,477	-10,619	-10,855	-10,818	-10,790	-10,765	-10,740	-10,713	-10,695	-10,677	-10,659	-10,640
Changes in Working Capital	2964	6484	-4280	-1144	394	-365	127	51	-65	39	10	-7
Free Cash Flow	17,741	21,812	10,444	13,597	15,117	14,639	15,492	15,577	15,660	16,025	16,246	16,448

2028E FCF	16,794
Growth after 2027 (g)	2.1%
WACC	5.3%
WACC-g	3.2%
Terminal Value in 2027	523,355
FY 18 PV of terminal Value	328,557

WACC

Discount Rate (ke)

Cost of debt (kd)

D/V

E/V

Tax Rate

Enterprise Value		435,964
FY 2018 Debt	-	54,591
FY 2018 Excess Cash		2,025
Equity Value (wacc)		383,398

Number of Shares Outstanding	2,997
12M WMT Stock Price	127.93

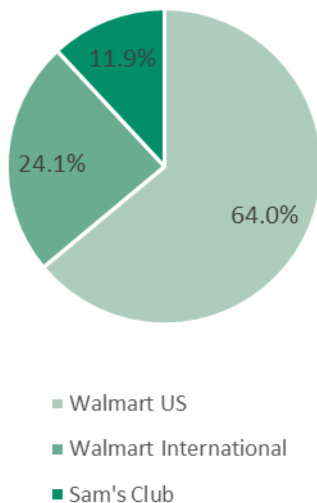
Company overview

Company Description

Walmart is the largest retailer in the world by revenue, with \$500 billion in annual sales. Headquartered in Arkansas, United States of America (USA), Walmart operates over 11,600 retail units under 59 banners, spread out through 28 different countries. It also has online retail operations across 11 of these countries. Its stores' format ranges from supercenters, discount stores, and Neighborhood Markets as well as other smaller formats. The company's operations are segmented in Walmart U.S (64.0%), Walmart's International (24.1%) and Sam's Club (11.9%), as of fiscal year 2017. Walmart customers value the price above all, which reflects the company's strategy to lead on price while supplying wide assortment and delivering a great shopping experience. Apart from being the world's largest company by revenue, Walmart is also one of the world's most valuable companies by market value, being valued at \$293 billion as of December 2017.

Walmart was founded by the Walton family in 1962 with the opening of Walmart's first discount store (Discount City) in Rogers, Arkansas. Later on, in 1984, the company opened its first Sam's Club, and in 1988, its first supercenter format. The company began its international expansion in 1991, opening its first store in Mexico and later acquiring a majority position of a local player. Walmart has been expanding its business since, winning a global recognition for its competitive prices. Its international stores are present in countries such as the United Kingdom, Japan, Brazil, China, Canada, Argentina, Chile, India, and parts of Africa and Central America.

**Exhibit 1: WMT Revenue
Distribution by Segment – FY**



Source: Company reports

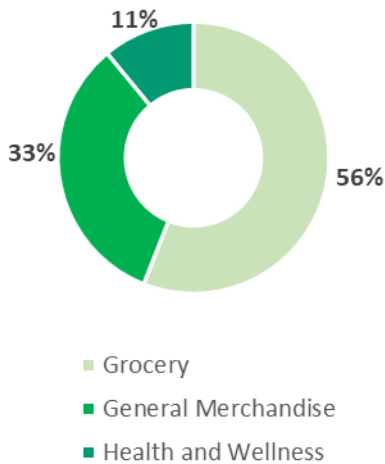
Segments Overview

Most of Walmart's revenue comes from its home market, the US, accounting for 75% of its total sales (Walmart US plus Sam's Club) – which continues to be the company's main strategic priority. Walmart has a market share of approximately 21.5%¹ in the US (United States) (2016). The increase in economies of scale and its pricing advantages have helped Walmart to unsettle small and independent operators. This, along with its ability to emulate its biggest competitor's growth has allowed the company to sustain its relevance.

As mentioned, the firm is divided into three segments – Walmart US, Walmart International and Sam's Club, each of the segments contributing to the

¹ <https://www.cnbc.com/2017/05/24/wal-mart-regaining-grocery-share-from-competitors-at-accelerating-rate.html>

Exhibit 2: Walmart US Product mix



company’s operating results differently. Nonetheless, each segment has generally maintained a consistent contribution rate to the company’s net sales and operating income in the recent years.

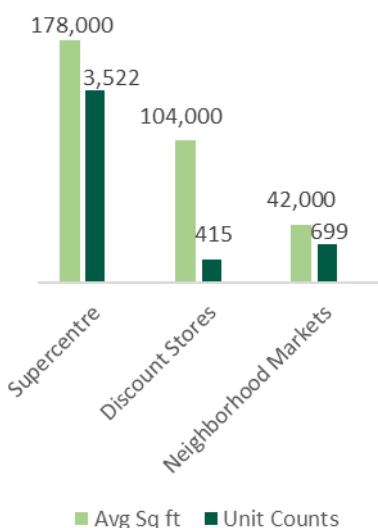
- Walmart US

Walmart US is the company’s largest segment in terms of net sales and operating profit contribution. In the fiscal year of 2017, it accounted for 64.0% of net sales. It has 4,672 stores (excluding Sam’s Club stores) in the universe of the 11,695 stores. Walmart’s US segment includes the company’s sales derived through US retail stores (excluding Sam’s Club), as well as, the e-commerce sales through www.walmart.com.

Store Formats

The Walmart US segment operates retail stores in the US, including all 50 states, plus Washing DC, and Puerto Rico. The US segment divides its stores into three major types: supercenters, which are the biggest store format, with an average of 178,000 square feet per store, which sell general merchandise and groceries; discount stores, the second biggest store format with an average size of 104,000 square feet per store, which also sell general merchandise but limited groceries; lastly, smaller format stores, which are majorly Neighborhood Markets, with an average size of 42,000 square feet per store, and only sell groceries. Additionally, Walmart has other smaller formats, which are used to test and understand the market demand and needs. In total, the US segment has 699 million square feet, weighing 60% of Walmart’s grand total, 1,164 million square feet for the fiscal year 2017.

Exhibit 3: Walmart US, Average Square Feet and Total Unit Counts



Products

The largest merchandising category of Walmart’s US is groceries, accounting for 56% of sales – \$172 billion. In fact, according to US Department of agriculture, Walmart group is the biggest retailer of grocery products in the US, taking in consideration Sam’s club share. Overall, US grocery sales represent \$206 billion for the group.

The grocery industry is fragmented, having many players and few barriers to entry. For this reason, the margins are low, because firms seek to offer lower prices than other companies in the industry in a bid to spur sales.

Walmart’s US segment stores offer in-house store brands such as Great Value, Equate, Everstart, and Sam’s Choice – among others. These private labels are

Exhibit 4: Three of Walmart US most known private labels



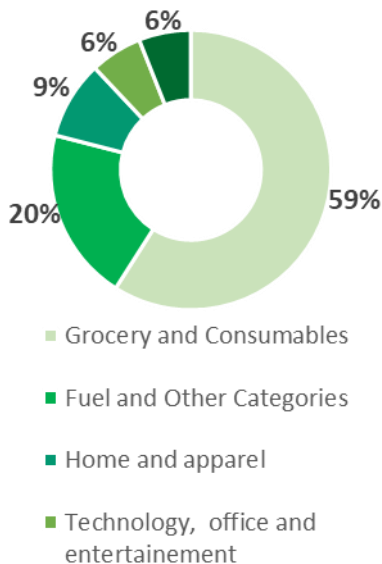
low-cost alternatives to national brands, and therefore their demand has been increasing. Consequently, Walmart has been investing in the expansion of its own private label brands' line to boost revenues. Other retailers such as Costco Corporation, German discount chains Aldi and Lidl, and the Target Corporation are also growing with the development of their private-label products.

- **Sam's Club**

Walmart's Sam's Club segment consists of membership-only warehouse retail clubs and digital retail. Regarding the membership-only warehouse clubs, its members comprise business owners as well as individual consumers. Moreover, the segment's operating income most significant component is this membership income.

This segment, which only accounts for the Sam's clubs located in the US, has represented 12% of net sales in the last years, and 6.6% of the operating profit in the fiscal year 2017. Due to the wholesale nature of the stores, net sales per square foot are the highest among all the company's segments, at \$606 million per square foot. On the other hand, its operating profit margin is the lowest at 2.91%, due to the clubs' product mix.

Exhibit 5: Sam's Club Product mix



Sam's Club merchandise fall into five product categories. As mentioned before, the largest category is groceries and consumables, weighing 59% (\$34 billion) of the segment's total sales. Sam's Club, as Walmart, also sells private-label items, such as "Member's Mark", and its proprietary brands, including Artisan Fresh, Daily Chef, Simply Right, among others. The second largest category is fuel and other categories which accounts for 20% of the segment's sales as of fiscal 2017, and which is greatly dependent on the volatility of fuel prices.

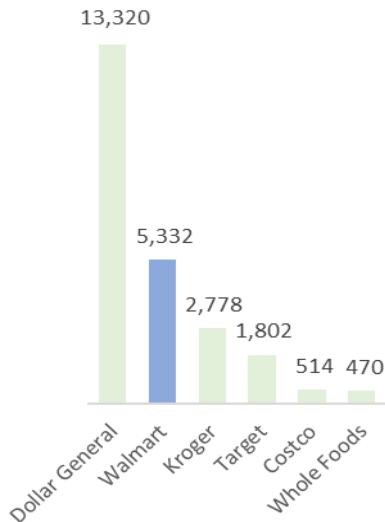
Warehouse clubs in the US are mainly dominated by Costco Warehouses, Sam's Club, and BJ's Wholesale corporation. However, the latter only has a small percentage of the market. A possible future competitor is Amazon, who, last year, started delivering grocery products through AmazonFresh.

Sam's Club revenue has slowly risen in the last years, driven by an incremental expansion in the number of stores and consistent improvement in comparable sales (comps), despite negative impacts from fluctuations in fuel prices.

- **Walmart International Segment**

Walmart International consists of operations outside the US and it includes retail, wholesale, and other businesses. These businesses consist of numerous formats, including supercenters, hypermarkets, supermarkets, Sam's Clubs),

Exhibit 6: US Number of Stores by company

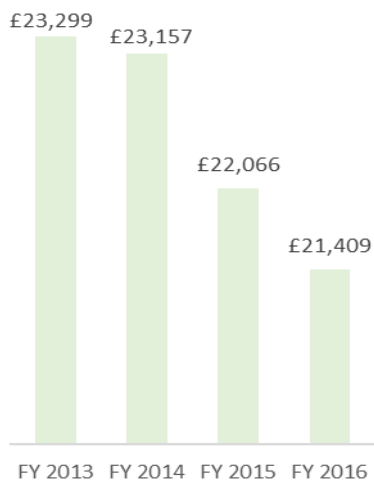


cash & carry, home improvements, electronics, apparel stores, drug stores, convenience stores, as well as digital retail. The overall gross profit rate for Walmart International is lower than that of Walmart US, primarily because of its merchandise mix and high costs involved in the efforts to drive expansion. In the fiscal year 2017, the operating income margins came in at 4.96% for Walmart’s International segment—compared to 5.76% for Walmart’s US segment.

Walmart International segment is the second largest, and it has grown through acquisitions, by expanding retail, wholesale, digital retail and other units. Its operations are spanned through 27 countries – excluding the US. In fact, Walmart has more stores overseas than it does in the US: 6,363 stores when compared to the 5,332 of total US stores, as of the end of the fiscal year 2017. Its biggest five countries’ operations are the United Kingdom, Canada, Mexico, Brazil, and China. In its international markets, Walmart competes with other supermarket and hypermarket chains (both local and multinational), such as Carrefour SA in France, Metro AG in Germany, Tesco in the UK, Loblaw Companies in Canada, and Ahold Delhaize in the Netherlands.

Having operations outside the US means the company is exposed to currency exchange rate volatilities when translating the operational results of all the countries whose official currency is not the US dollar. The last annual sales figure reported a decrease of \$7 billion, mainly impacted by the decline of \$11 billion derived from negative fluctuations in currency exchange. Moreover, to understand the global performance of the International segment we have to analyse each country’s performance. Following, we will give an insight into Walmart’s biggest five countries operations outside the US.

Exhibit 7: ASDA Historical Revenues



United Kingdom

The United Kingdom is one of the biggest overseas operations for Walmart. The company operates 631 stores in this country – the second highest among overseas operations after Mexico. In the United Kingdom, the market is dominated by four grocery chains: Tesco, Sainsbury, Morrisons, and ASDA – Walmart subsidiary. ASDA was acquired by Walmart in 1999. Despite industry inflation in recent years, the company has underperformed when compared with its UK competitors, as competition has been getting fiercer. Its employed strategy of “Everyday Low Prices” might be blameable for its decline in sales as German discounters Aldi and Lidl, also present in the UK’s market, erode the company’s price advantage. ASDA is the third biggest retailer in the UK with 15% of market share, currently. Two years ago, this value was 16.2%. This decrease is explained by the growth of the German discounters, having Walmart been the

Exhibit 8: Retail Square Footage per Capita

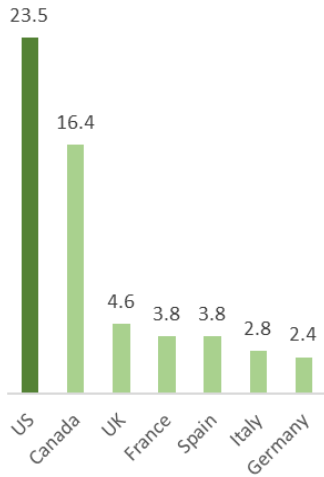


Exhibit 9: Walmart’s Logos in the US



most affected retailer among the four largest grocery chains. The company’s performance reflects this decrease, with its revenues dropping almost 3% per year for the last four years, mostly driven by a decrease in comparable sales. Pushed by competition, ASDA was forced to adapt its strategy. In the last two quarter releases (August and November of 2017), ASDA showed the first quarter-on-quarter sales rise in three years, a result of the price cuts and store improvements. On the one hand, retailers are having to cope with more expensive food imports caused by a weaker pound, since Britain voted to leave the European Union, on the other hand, the consumer disposable income is under pressure from rising inflation, subdued wage growth, and economic uncertainty.

Canada

Walmart entered the Canadian market in November 1994, and it has since then had a phased growth. It started out by only having discount stores and rolled out its larger supercenters in late 2006. To the date, it has 330 supercenters and 80 discount stores, totalling 410 units. The company’s nearest competitors include Loblaw Companies (Canadian), Canadian Tire (Canadian), and Costco (American). The biggest players in the market account for nearly 60% of the market share as of fiscal year 2017.

Walmart has been employing its “Everyday Low Prices” and “Everyday Low Costs” strategies in Canada in the past few years. These strategies enabled the company to be more competitive, compared to the competition. Furthermore, the company is bullish on its e-commerce channel.

Mexico

Mexico is the biggest international market for Walmart in terms of number of stores, with 2,411 retail outlets in this country. Walmart entered Mexico’s market in 1991, and it runs operations in the country, through its publicly listed, majority-owned subsidiary (70.51% stake as of December 2016) Walmart de Mexico y Centroamérica, S.A.B. de C.V. – or simply, Walmex. This subsidiary detains operations not only in Mexico, but also in Costa Rica, El Salvador, Guatemala, Honduras, and Nicaragua.

On a two-year stacked basis, the comps jumped 12% in the region where Walmex operates, with Mexico reporting a 13% growth. Category-wise, Mexico reported improved sales across all its merchandise divisions. Net sales in Central America saw an increase of 6.4%, due to positive comps in all countries in the region. Despite strong revenue growth in the region, adverse currency

Exhibit 10: Walmart's Logos for the International Segment



fluctuations have negatively impacted sales, in particular, the strengthening of the US dollar against the Mexican peso.

In 2013, Walmex launched the e-commerce channel in Mexico, and through its moderate growth, it has, consequently, seen an increase in sales. Furthermore, Walmart has opened kiosks in some of its stores (approximately 150), which allow customers to place their orders online and pay at the stores. The customers may choose to pick up the items from the stores or, alternatively, to have them delivered to their home. The usage of kiosks is a safer option, compared to using credit cards online, as customers don't have to fear data breaches. Such situations of data breaches have been recently reported by Target, Staples, and Home Depot, which compromised the personal data of millions of accounts.

Walmex is also trying to improve the performance of its Sam's Club, and hence, it is trying to provide greater product differentiation in its merchandise, importing more goods from the US Sam's Club, and reducing excess inventories, to create value for its customers. In the future, Walmart aims to continue offering competitively priced merchandise in Mexico.

Brazil

Walmart entered the Brazilian market in May 1995. Nonetheless, it was not until 2004, when it acquired the Brazilian retail chain in north-eastern Brazil, "Bom Preço", with 118 units, that it significantly expanded its stores. Since then, the company has expanded through several acquisitions, totalling 498 units to this date.

Walmart closed 60 underperforming stores in Brazil in fiscal 2016. These stores represented more than 10% of the company's stores in the country and approximately 5% of the company's sales. Brazil's problems stem from deeper economic issues, compounded by currency factors and high inflation. Walmart's performance in Brazil has been a challenge lately, partly due to the macroeconomic issues the country is facing, and partly due to the increasing valuation of the US dollar against the Brazilian Real.

Emerging markets can provide a boost to Walmart's international business, and Brazil holds strong potential. Even so, Walmart has not been fully successful in establishing itself in the region.

"Cash and Carry" stores (wholesale) in Brazil are increasingly attracting consumers who prefer to buy in bulk to get discounts. Revenues from these stores have been growing significantly, and in 2014 they accounted for 15% of

Brazil's grocery retail sector, showing a rise from 10% in 2013. Although Walmart has its own cash and carry brand "Maxxi" in Brazil, it has not been able to withstand competitive pressures from Carrefour and GPA. Moreover, as consumers are finding it difficult to reach hypermarkets given the heavy traffic in Brazil's cities, neighbourhood stores are also strongly increasing.

Walmart is planning to invest \$320 million over the next three years to renovate and redesign its stores while looking to build a network of stores which can thrive over the long term as the company develops and strengthens its operations in the region and increases efficiency.

China

In Asia, Walmart is primarily targeting the key markets – China, India, and Japan. These markets present the retailer with an opportunity to drive higher future growth in sales.

Walmart entered in Shenzhen, China, in 1996. It mainly operates through supercenters, hypermarkets, and Sam's Club membership stores, totalling 439 stores. The first flagship Sam's Club in Shenzhen ranks the best-selling store among all Sam's clubs in the world in terms of sales figure.

Walmart faces competition against local players like Sun Art Retail Group Ltd and China Resources Enterprise Ltd. Despite smaller presence than Walmart, the Sun Art group has performed better with its more localized approach, resulting in a higher market share. Having a similar business model to Walmart but a better understanding of customer behaviour, have helped the local retailer to win Walmart's potential clients.

Walmart has had problems in fully understanding Chinese customers, as their buying decisions are not always price driven. Chinese customers are more inclined towards tailor-made products and a shopping environment that reflects the local preferences. Since Walmart is a foreign retailer, it has not been able to gain significant customer trust, despite its efforts to be local.

Although China does not contribute much to Walmart's revenues (estimated at 3% of the overall company's revenues), the market is of vital importance to the company for the long-term perspective. Walmart needs to adapt its strategies to vitalize its Chinese business, so it can take advantage of the substantial growth opportunity it presents.

China's retail growth has different drivers, among which, the rapid urbanization and the increase of middle-class consumers. Nowadays, the Chinese consumers want their food purchases to be easy and convenient. Consequently, e-

commerce has become an important aspect for retailers, in order to reach, and better serve their customers. Consequently, Walmart acquired 100% of the shares of Yihaodian.com in July 2015, launching its mobile shopping application, providing home delivery service in the Shenzhen area. In June 2016, Walmart announced a strategic alliance with China's largest e-commerce company by revenue, JD.com, with the aim to improve the service provided to consumers across China through a combination of e-commerce and retail.

Share Price Performance

Walmart became a publicly stock traded company on the 1st of October 1970 and soon was listed on the New York Stock Exchange. The initial offering was of 300,000 shares of common stock, priced at \$16.50 per share. Since then, it has had 11 two-for-one (2:1) stock splits. If one had purchased 100 Walmart shares in its initial public offering (IPO), they would now be valued at \$20 billion, approximately, representing a compounded annual growth rate (CAGR) of 22.13% in nominal terms, plus the annual dividends received. Over the last 10-year period the company's stock price registered a total return of 142.7%, in nominal terms, compared with a 105.2% return of the SP 500 Index, also in nominal terms, taking in consideration the distributions collected but without reinvesting.

Walmart's stock performance, having a size, financial strength, and sector orientation means that the company is included in the portfolio holdings of several exchange traded funds (ETFs) including the SPDR S&P Retail ETF (XRT) with an approximate weight of 1%. Due to its product orientation, Walmart and other retail companies – Costco Wholesale, Safeway, and Kroger – are included in the portfolio holdings of the Consumer Staples Select Sector SPDR ETF. Together, they account for approximately 13.5% of the portfolio's holdings. Walmart is the third largest holding in XLP. Its weight is approximately 7.5%.

The Sector

As retailers target every inhabitant as customers, the retail market is, to a certain degree, correlated with the state of the economy. Thus, to do a more accurate estimate of what is going to be the future of retail, we have to understand not only what is happening within the retail business, but the broader macroeconomic outlook and how it is influencing retail.

United States of America

- Macroeconomic framework

The United States are the biggest economy in the world in terms of nominal gross domestic product (GDP), estimated on \$19.4 trillion, and second-biggest economy when considering purchasing power parity (PPP), only behind China. It accounts for 25% of the gross world product in nominal terms. As for GDP per capita, in nominal terms, the country ranks as the eighth strongest country, with \$59,500 per capita.

Ten years after the beginning of the great recession, the US economy is showing signs of strength and stability. The unemployment rate held at 4.1% as of November 2017 is the lowest rate since February 2001. It is expected to slightly increase towards 2022, for a long-run normal level of 4.8%, according to the federal reserve. US' consumer price inflation increased to 2.2% year-on-year in November 2017, from 1.6% in June. This increase is due to the rise in gasoline prices, while healthcare and apparel costs are falling. Nonetheless, the core inflation rate, which excludes the prices of food and energy, fell to 1.7% from 1.8% in October. This value did not correspond to the market expectations of 1.8%, and it is still below the federal reserve long-run objective of 2%.

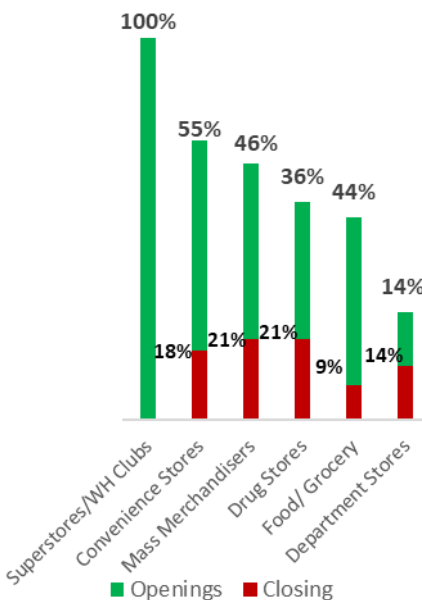
Although the macroeconomic indicators point for a consistent growth of the economy, some vulnerabilities might have emerged during the extended period of exceptional monetary easing. In particular, asset prices are elevated, and the corporate sector is highly leveraged to shocks.

The real gross domestic product is estimated to have increased at an annual rate of 2.6% for the first three quarters of 2017, and according to analysts, it is unlikely to breach the ambitious 3% target set by the Republican president, Donald Trump. The consumer spending has been growing at a moderate rate, as a result of solid income gains, combined with ongoing increases in wealth. In the long-term, US GDP growth rate is projected to trend around 2% in 2020.

Economic expansion is anticipated to continue in 2018 and onwards, supported by strong business and growing consumer confidence, which, in turn, will enable consumption and investment to increase. The impact on consumption, by the decrease in employment growth, will be partly counterbalanced by wage growth increase, as the labour market tightens further.

Fiscal policy is predicted to become more supportive in 2018. Several measures are expected to be introduced, lowering tax rates on income (both corporate and

Exhibit 11: Walmart US stores openings and closings in percentage in FY2017



personal), and stimulating consumption and investment. With the low unemployment rate, the presumed fiscal boost will also contribute to additional wage growth, thus providing the conditions for the monetary policy to continue to normalise gradually. Deregulation and tax reform will help propel stronger investment and lift productivity.

- The Retail Industry in the US

The US retail industry annual sales in 2016 were estimated on \$3.72 trillion², having grown 2.5% year-over-year from the preceding 10-year period, and grown 3.6% annually since 2010 – the end of the recession. The US retail industry now employs almost 13 million people, 1 million more since the peak of the crisis, in 2009.

In the beginning of 2017, an overall negative perception about the future of bricks and mortar retail (traditional retail) industry was spread through the media, supported by some misleading reports showing an increasing number of stores closing. Since then, more recent and accurate research showed the opposite: according to IHL Retail research, core retail stores have had 1326 net openings throughout 2017, showing that despite the closure of several stores, there were many more openings.

The bigger picture shows us that the macroeconomic environment of retailers like Walmart is positive. The growth echoes through all customers, as consumers are now shopping more at Walmart and Dollar Tree stores, regardless of their income level. Even so, the overall positivity may not be applied across every sector of the retail industry. For example, there has been a decrease in department stores, mainly due to the rise of fast fashion and the breakout of cosmetics and beauty.

Looking ahead, the US population is expected to grow older, which might not be favourable to physical retail stores sales, as older generations tend to prefer services over products. Nevertheless, this might work in favour of retail as consumer habits are changing, and in the future, we might observe older generations adhering more to online retailing. To the date, the major share of frequent online retailing (more than once in a week) in the US is done by millennials, accounting for 54% of all sales³. Thus, with the growth of this generation, an increase in online retail sales is expected for the older age

² US Census Bureau

³ UPS Study: Pulse of the Online retailer

groups. Nonetheless, according to a Pew Research of American population, in the age group of 50 to 64, 72% of the survey's respondents have shopped online; in the age group of over 64, the value is 59%, and in the age group between 18 and 49, the value is 90%. The percentage of population with more than 65 years old is expected to increase to 21% by 2030, against the 15% in the 2014 census. On the other hand, the group of people under 18 years old is expected to decrease from 23% in 2014 to 21% in 2030. The middle class has shrunk from 61% in 1971 to 50% in 2016, and it is expected to continue shrinking. Simultaneously, the share of income that these households controlled, has gone from 62% in 1970, to only 43% today. Nonetheless, conversely, the upper class grew by 50% in numbers, and 69% in terms of share of income over the same period.

The Online Retail Industry in the US

Online retail represents only 9.1% of the total retail sales as of the 3rd quarter of 2017, nonetheless, it has driven 29% of the retail growth. Many retailers were slow to realize the real threat of the rise in online shopping. For instance, the remarkable growth of Amazon Prime with its free two-day shipping has placed consumers in a position that retailers aren't accustomed to. Consumers, who once had to shop in the retailer's physical stores (as it was the only available alternative) are now shifting their habits as online shopping offers them more comfort. Now, retailers must convince consumers to shop in their stores to sustain store traffic. According to a Piper Jaffrey report, over 70% of the US households now have Amazon Prime, as well as 82% of US households with incomes over \$112k.

The top ten US online retailers also have physical stores, which proves that the success of e-commerce retail doesn't rely on its online structure only but on a mixed offer. An example of this is Amazon, who recently acquired Whole foods to strengthen its physical position.

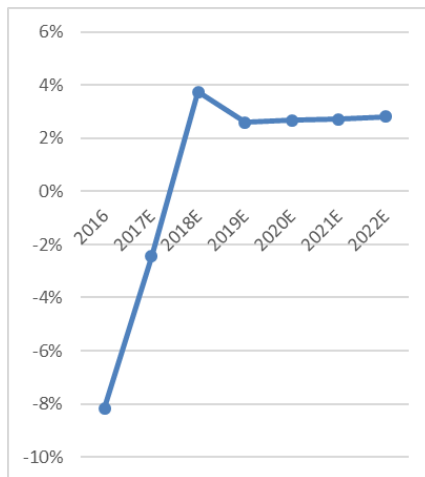
US online retail sales are projected to hit a 14.5% growth in 2017, which is close to the accelerated 14.9% growth in 2016, and 14% growth in 2015. The US online sales are expected to top \$600 billion by 2020⁴ and to surpass the \$1 trillion mark in 2027. These values compared with the \$445 billion in 2017 represent a compounded annual growth rate of 12% through 2020, and 9% over the next decade, in nominal terms. Additionally, online retail sales are expected to grow, and represent by 2021, as much as 13.7% of total retail sales in the US.

⁴ FTI Consulting Research

International Markets

United Kingdom

Exhibit 13: UK's expected GDP Growth



Macroeconomic framework

The United Kingdom is one of the strongest countries in Europe in economic terms. It is second in nominal GDP in Europe (estimated at \$2.619 trillion USD for 2016), and third in population (65.648 million), which makes it an attractive market for Walmart. The UK has experienced steady economic growth through the 90s and 00s, however, the recent referendum for the country to leave the European Union has brought a lot of uncertainty to the future. In an economy where the value of exports and imports account for 57% of GDP, the exit of the European single market leaves many expecting for what is to happen. The economic outlook depends heavily on the Brexit negotiations, and on how the UK will trade with other international markets. This uncertainty comes with a price, leading to negative rather than positive overall forecasts for the economy. According to PWC's UK Economic Outlook, real GDP growth is expected to decrease to 1.5% for 2017, and further to 1.4% for 2018, from 1.8% in 2016. This decrease in growth is majorly attributed to lower consumer spending growth, due to the sharp rise in inflation, from a flat 0.04% in 2015 to an estimated 2.7% in 2017 and 2018, squeezing household spending power. The macroeconomic environment has pushed the British Pound to minimum values since the financial crisis, raising the cost of imports and reducing consumer spending power. However, not everything is negative, with a weak Pound sterling, the UK becomes an attractive destination for tourists, and exports become cheaper. Nonetheless, the most recent growth figures show that the impact of a lower pound on consumption is coming through much more quickly, than its impact on trade.

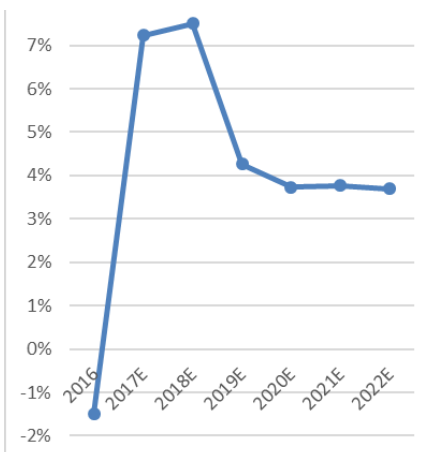
Retail in the UK

The UK retail industry has been through a tough period in the recent years, being negatively impacted by the great recession. According to UK's bureau of statistics, the total annual retail sales were estimated at £354,721 in 2016, and are estimated to grow 4.7% this year – a slight increase compared to last year's growth (4.5%). After a negative growth in all retail sales in 2011, the industry seems to be gradually recovering although there still exists a certain degree of uncertainty concerning the future state of the economy brought by Brexit. The macroeconomic fundamentals seem to support, at least in part, this trend, since unemployment remains at historical lows, and the economy is still growing, albeit

at a slower rate. The biggest headwinds come from the recent rise in inflation, which has hit a five-year high in September, squeezing the household spending and real wage growth.

Following the global trend, online retailing in the UK is also increasing, forging an inevitable evolution in retailer business models. Online retail accounted for 14.9% of total retail sales in 2016, despite the decrease in growth of online retail from 14.4% to 7.9% in 2016. Forecasts by GlobalData estimate online retail to account for 18.5% of total sales by 2022. The economic uncertainty influencing the whole industry has impacted more significantly the retailer's operating margins, with currency fluctuations imposing higher costs, which the industry supports, in order to avoid making the consumers paid for them. Nonetheless, operating margins are expected to grow in 2018 as costs pressures start to wane.

Exhibit 14: Canada's expected GDP Growth



Canada

Macroeconomic framework

Canada is among the most developed countries in the world, ranked 10th in nominal GDP terms (\$1.53 trillion), and 17th considering purchasing power parity. The country has maintained a sustained growth over the years, making use of its natural resources, a strong industry, and a well-managed monetary policy. For 2017 it is estimated that Canada has had an economic growth of 3.1%, a significant rise from the 1.6% of the previous year. Having numerous free trading contracts with various economies worldwide means the Canadian economy is exposed to the global state of the economy. Thus, in step with stronger business and consumer confidence, global investment growth has picked up from its recent lows, and in turn, provided growth for the Canadian markets as well. Europe has been the main driver for the global growth, expected to reach an economic growth of 2.2% in 2017, and 2.1% in 2018. Additionally, US and China are also contributing, with estimated economic growths of 6.9% and 2.6%, for 2017 and 2018, respectively. However, along with the upside of growth, come some uncertainties which might break the country's momentum: the rise of interest rates in the US up to 2.25% by year-end 2018, combined with the fact that the bank of Canada may raise its policy rate only to 1.5%, means that borrowing globally will become more expensive, and which, consequently, will impact the Canadian business. Additionally, the NAFTA negotiations – the free trade contract negotiations between the US, Canada, and Mexico – happen the incoming year of 2018; during these, it might be challenging to come to an agreement, considering US recent economic goals. The break of this contract

could have a negative impact on the Canadian economy, as the latter is extremely dependent on exports to the US.

Regarding the oil supply, its reduction by the Organization of the Petroleum Exporting Countries (OPEC), and by other oil producing economies has stabilized the prices. These prices are expected to range between \$50 and \$65 per barrel over the course of the next year, helping to spur the growth of the Canadian economy. This oil industry accounts for an estimated 4% weight on the GDP.

Retail in Canada

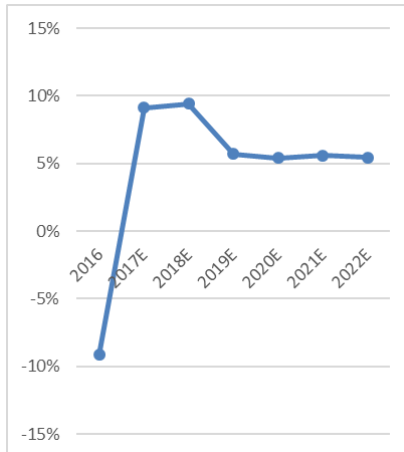
The Canadian retail market is estimated on C\$550 billion, having had a consistent growth over the major part of the last decade, averaging a compounded annual growth of 1.8% in real terms, compared to the annual real growth of 2.4% in the last 5 years. Like other international markets, the retail market shrunk 3% in 2009 due to the financial crisis. The year of 2017 was especially strong for the retail industry, with an estimated total retail sales growth of 7%, which could turn to be the best Canadian retail sales since 1997.

The household disposable income per capita is expected to continue to register a moderate growth in 2018, after having increased by an estimated 4% in 2017, and 1.46% in 2016. Moreover, average household net worth rose, as real estate values climbed in the prevailing low-interest rate environment since 2009. The changing household demographics in Canada are also expected to affect retail, as aging consumers favour spending on services over goods. In fact, as the country's population skew older over time, the share of household spending on retail goods is expected to decline.

Withal, consumers who live near the US-Canadian border, who have been shopping in the US to take advantage of lower prices, are expected to decrease, as they face a stronger US dollar. Cross-border shopping, as measured by same-day car trips, historically tracks USD exchange rates closely. The number of these trips to the US continued to decline through 2017 after sharp falls throughout 2016. Furthermore, retailers in Canada are also attending to consumers, by, for instance, adjusting store hours and dates of discount sales to match the US, encouraging the spending within Canada rather than in the US.

Regarding the e-commerce, it continues to affect the retail industry being seen as a threat to physical retail store profits, and to employment. Currently, e-commerce remains a fraction of overall retail spending, at nearly 10% of national sales, but growth in online sales is outpacing 'brick-and-mortar'.

Exhibit 15: Mexico's expected GDP Growth



Mexico

Macroeconomic framework

Mexico is the second largest economy in Latin America, with an estimated nominal GDP of \$1.14 trillion in 2017. The country has engaged in structural reforms in 2012 to break free from three decades of slow growth, low productivity, pervasive labour market informality and high income inequality. Major structural measures have been legislated since, aiming to improve competition, education, energy, labour, infrastructure, telecommunications, and the tax system. These reforms have ensured the resilience of the Mexican economy to the challenging market conditions in the recent years. However, the reforms weren't fully implemented, and growth was not strong enough to achieve better living conditions for the Mexican population.

Throughout 2017, inflation soared, causing the real labour income growth to decrease, and limiting consumer purchasing power. Annual consumer price inflation peaked in August, at 6.7%, reflecting the accumulated currency depreciation and fuel prices spikes.

The economic growth is expected to be 2.2% in 2017, compared with the 2.3% from 2016. Moderate growth is the consequence of low private consumption, as well as weak public and private investment. Nevertheless, the service sector is generating employment growth, reaching a 10-year low unemployment rate. Projections for 2018 indicate only a 2% real GDP growth, as weakness in investments is expected to continue mainly due to public investment spending cuts. Mexico's economy, like the Canadian economy, heavily depends on the access to the US market to export and import goods, thus, Mexico's future prosperity will be greatly influenced by next year's NAFTA negotiations outcome.

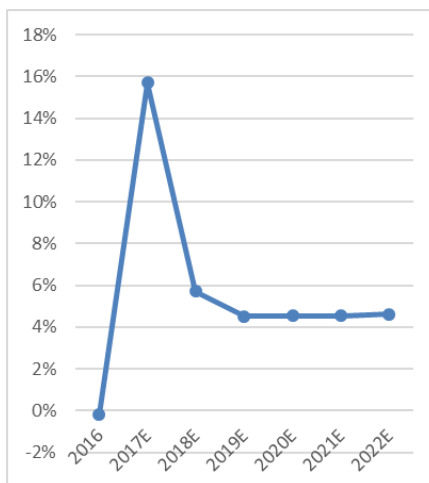
Retail in Mexico

Albeit an overall negative economic context, including the Mexican Peso weakening against the US Dollar, and the rise in consumer prices (5.851% in 2017, compared with the 2.823% in 2016), the internal macroeconomic conditions keep showing resilience. Nonetheless, signs of fatigue start to emerge: total retail sales are estimated to have grown 2.6% in 2017, compared with 5.5% in 2016, reflecting the squeeze in consumers purchasing power by the rise in inflation; additionally, the earthquake and hurricane-related disruptions activities have also contributed to the decrease in retail sales growth. Even so, most of sales growth is delivered by online retail, projected to have grown 7.5 times faster than retail. Online retail, which only accounts for 3% of total retail

sales, is expected to grow much further as the country's demographics heads to a younger population. According to PWC, the working age group, which comprises people from 15 to 59 years old, represents 60% of the total population and is expected to grow by 16.6%, or 13 million until 2030. The median age of the Mexican population is now 27 years old.

Retail has arguably been the brightest spot in Mexico's economy, with gains in this sector helping to offset sluggish growth in the manufacturing and agricultural sectors. Therefore, what 2018 and onwards holds for retail will depend, to some extent, on the economic context, which holds some uncertainty, yet, we believe that online retail has the potential to drive the industry growth, as this technology may prove to be more suitable for the younger generations' needs, and as its growth is far from reaching maturity.

Exhibit 16: Brazil's expected GDP Growth



Brazil

Macroeconomic Framework

Brazil's economy has expanded greatly since the beginning of the 21st century until 2013. During this period, 29 million people were lifted out of poverty, inequality of wealth was largely decreased (Gini Index – index which sums up the degree of economic inequality in a society – fell by 6.6%), and income level of the lowest income class rose 40%, which translates to 7.1% year-over-year, on average. By 2012, Brazil was one of the fastest-growing economies in the world, with an annual growth rate of over 5%, temporarily surpassing United Kingdom's economy, to become the sixth largest in the world. However, in 2014 the country decelerated its growth and then entered a recession, mainly due to a downturn in commodity prices (that revealed structural problems) and to lack of capacity to make the necessary policy adjustments. The country's economy contracted 3.8% in 2015, and 3.4% in 2016. Public debt has risen to 74% of the GDP and the headline deficit to 9% of the GDP. All the negative macroeconomic indicators, coupled with a political crisis, led to a lower consumer confidence and investment.

Recently, Brazilian economy seems to finally be taking off, initially driven by agriculture, it now seems to be a broader-based recovery, with consumer confidence improving and retail sales rising, despite still weak investment. The gross domestic product is expected to grow by 0.3% in 2017, and by 1.6% in 2018. Fiscal stance will be more relaxed through 2018, and it will tighten by 2019, with decreasing fiscal targets aiming to improve the primary balance to -0.6% of the GDP by 2020. The fall in inflation from almost 11% to below 3% has justified an easy monetary policy, providing room for interest rates cuts which will

bring cheaper financing costs, stimulating the economic recovery. The unemployment rate is expected to decline in 2018 to 11.4%, having reached a record high in March of 2017 at 13.7%.

Despite the improvements in poverty reduction achieved in the past decade, inequality remains at high levels. Brazil's medium-term future economic environment will depend on how structural reforms will be handled to reverse the untenable level of public debt and on the execution of reforms to improve growth. One of Brazil's main challenges, in order to achieve higher growth in the medium-term is to raise productivity and competitiveness. The year of 2018 holds some uncertainty as political elections will be held in October, which leads to question if the next government will be able to succeed in delivering the ambitious reforms.

Retail in Brazil

The Brazilian retail outlook is positive, with 2017 presenting signs of recovery, as the country's economy is starting to emerge from a recession. Comparing with 2016, 2017 had an estimated growth in the retail business of 2.1%, in real terms. This improvement was the reflex of positive economic indicators: unemployment has slightly decreased from the historical high at beginning of the year, being at 12.2% as of October 2017 (an 11% decrease); this decrease, along with the decrease in inflation, from 6,99% at the end of 2016, to 2.8% at the end of 2017, is helping to boost Brazilians disposable income. At the same time, consumer confidence index edged down from 101.2 in October to 101 in November 2017, but still remaining higher than 98.5 in August, reflecting an overall positivity about the Brazilian's financial situation and unemployment. Yet, much of these improvements are not structural but rather cyclical and, overall, a cautious outlook is maintained for the Brazilian consumer. The Brazilian population is heading into 2018 with a double-digit value for unemployment, high political risk and elevated levels of household debt, which will continue to influence the consumer's purchasing decisions, and consumer's confidence over the short-term.

For 2018, retail is projected to increase 3.7% as the economy is expected to pick up. In particular, supermarkets, hypermarkets and, food and beverages products are predicted to increase 3.2% taking advantage of real wage growth and recent deflation in food products.

China

Macroeconomic Framework

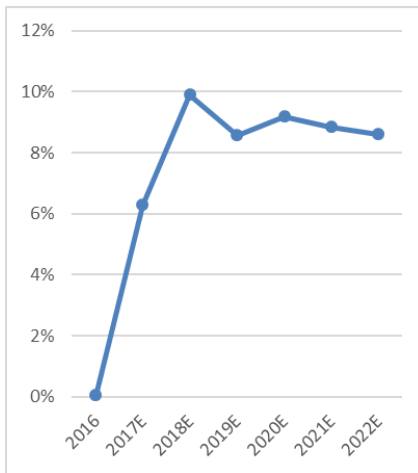
China as the most populated country in the world, with 1.3 billion people, is the second largest economy in the world, and it is increasingly playing an important plot in the global economy. Since the economic reforms implemented in 1979, China shifted from a centralized economy to a more market-based economy, experiencing remarkable growth and social development. During this time, China became an industrial powerhouse, expanding beyond the initial successes in low-wage-sectors, like clothing and footwear, to more sophisticated industries like computer production, pharmaceuticals, and automobiles. Real gross domestic product growth averaged 10% year-over-year for the past 30 years – the fastest sustained expansion by a major country in history. In 2009 China became the first Asian country to breach the \$10 trillion mark in terms of GDP (PPP), and by 2015 the first country worldwide to breach the \$20 trillion mark, doubling its economy in the shortest time so far (six years). In nominal terms, GDP is estimated at \$11.2 trillion, only behind the US. Despite its GDP rank, and a GDP per capita growth from \$156 to \$8,583 between 1978 and 2017, China is still considered a developing country, as its income per capita is still a fraction of other developed countries, and its market reforms are incomplete.

To guide its economic development, the Chinese central government adopts five-year plans highlighting the country's economic priorities and essential policies, as well as setting red lines (bottom lines) for government performance. Economic development has been steeper in coastal provinces, as opposed to the interior of the country, and economic inequality has ascended as a result of the rapid growth. Therefore, policy adjustments are required for a more sustained growth in the future. The central government has set its 13th five-year plan (2016-2020) growth target to a value of 6.5% annually, from the annual 7% in the 12th five-year plan, reflecting the rebalancing of the economy away from export-led growth, and towards a more consumption-led and higher-value-added growth. This plan focusses on the quality of growth, while still maintaining the objective of achieving a moderately prosperous society by 2020, aiming to increase energy efficiency, to improve education and healthcare, and to expand social protection.

Retail in China

China's economic rebalancing to a more consumption-driven economy, represents huge opportunities for retailers, as both foreign and local companies continue to expand to meet the growing demand. Nonetheless, competition is increasingly fierce.

Exhibit 17: China's expected GDP Growth



China is the second largest consumer market worldwide, with total retail sales of consumer goods of ¥33,231 billion in 2016, having doubled in the last six years. In 2017 the total retail sales are estimated to have grown 10.4%, having slowed down in the context of the market growth for the last 10-years of 12.24% in real terms. Nevertheless, China is still one of the fastest growing retail markets, and it represents a large potential, as the family household income increases and the middle class grows. Furthermore, millennials are becoming particularly influential in the retail sector, driving the industry to be more online based and technological. China is the world's largest and most innovative e-commerce market, having reached ¥1.40 trillion in online retail sales of goods and services in the first quarter of 2017 – an increase of 32.1% in comparison with the previous year. Online retail sales are estimated to weight 17% of the total retail sales and are expected to grow by 25% by 2020, driving most of the sales growth.

The supermarket and hypermarket stores expansion rate has been slowing down, as consumers shift to more suitable ways to shop, such as convenience stores and e-commerce. Recently, the online fresh grocery market is thriving as consumers' demand for healthier products is increasing. The leading e-commerce retailers such as Alibaba and JD.com (Walmart's partner) have forayed this market.

In terms of household expenditures, according to China's bureau of statistics, food consumption accounted for an estimated 37% of household expenditure or about ¥2,900 per year; by 2015 it accounted by an estimated 31%, or nearly, ¥4,100, thus representing a 41% increase in the 10-year period. In the future, the growth is expected to be steeper as the Chinese household income is projected to increase.

Valuation

We valued Walmart based on a DCF approach, forecasting future cash flows for a 10-year period and then discounting to the end of 2018 with a WACC of 5.31% and a terminal growth rate of 2.1%, achieving a weighted average value per share of 127.9. We chose this approach as we believe it is the best method to capture Walmart's intrinsic value.

When predicting the future cash flows for Walmart, we focused on three main revenue drivers that were found to be the main influencers of the company's performance: average revenue per square foot, number of stores, and average square feet per store. What's more, we forecasted the gross profit margin for the

company as a whole, based on what we expect to happen in each segment (Walmart US, International, and Sam's Club), and on how each segment has contributed. Below, we explain how we forecasted Walmart's cash flows, based on our estimates.

Walmart US Segment

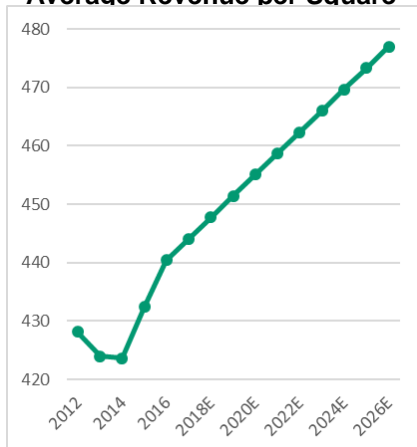
Since Walmart US is the segment that contributes the most to the net sales, gross profit, and operating income of the whole company, predicting the future performance of this segment is especially important.

Average Revenue per Square Foot

The average revenue per square foot refers to the average annual revenue per square foot of retail store space for Walmart US stores. This is an important measure to understand how productive is the square footage, and it is useful to do comparisons across regions. The average retail square feet stood at \$433 in 2008, slightly decreasing to \$429 in 2009, and declining to \$422 in 2010 due to the economic downturn. The figure recuperated to \$428 in 2012 as the company slowed its expansion, and remodelled some of its stores to occupy less space. In 2013, due to an increase in taxes, higher healthcare costs and gasoline prices, consumer confidence pressed sales per square foot to decrease to \$424, the latter value, remained steady for 2014. Boosted by smaller store expansion, growth in the online channel, and an increase in the grocery business, this number has gradually picked up since then. Revenue per square foot was \$432 in 2015 and \$440 in 2016. The first 9 months results of 2017 point to a similar growth as in the last two years.

Looking forward, we expect Walmart to gradually reach \$477 per square foot at the end of our 10-year forecast period, representing a 0.8% CAGR. Online growth and smaller store expansion will continue to be the drivers of the revenue per square foot increase. The online retail market in the US is expected to grow 125% over the next 10 years, breaching the 1 trillion-dollar mark⁵. We predict that Walmart, along with Amazon, will conquer a bigger share of that growth compared with other retailers. Walmart has strengthened its position as an online retailer through multiple acquisitions (Jet.com, ShoeBuy, & others), as well as through partnerships, building a structure that allows them to grow. More recently, Walmart partnered with Google to sell its products through the voice-enabled Google Home. Additionally, the company is changing its legal name in

**Exhibit 18: Walmart US'
Average Revenue per Square**



⁵ 2017 U.S. **Online Retail** Forecast- FTI Consulting

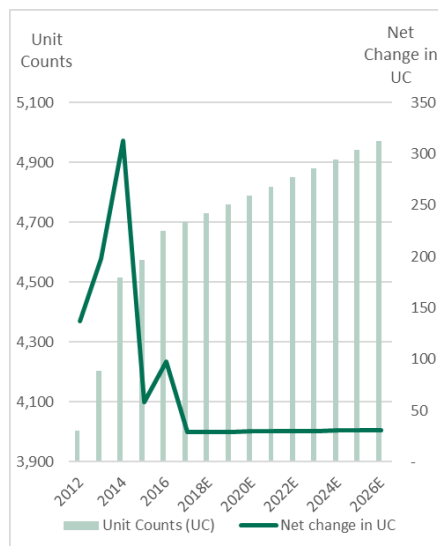
2018, from Wal-Mart Stores, Inc. to just Walmart, to reflect that customers can buy not only in physical stores but online as well.

Despite our positive forecast for revenue growth, we don't discard some challenges that may surge, namely, the future macroeconomic scenario, which still has uncertainty associated with, and which may lead to reluctant consumer spending. Furthermore, Walmart's expansion carries a risk of cannibalization of its own sales, due to its large presence in the US. For this reason, we also created a downside scenario in which

Number of Walmart US Stores

The number of US stores has been consistently increasing over the years, and we expect this trend to continue until 2027, although at a slower pace. Walmart had a net increase in number of stores of 313 in fiscal 2015, 58 in fiscal 2016 and 98 in fiscal 2017. In our forecast, we projected the net change in the number of stores for each of the store formats: supercenters, discount stores, Neighborhood Markets and other small formats. Regarding the net change in supercenters stores, we considered a constant growth of 0.8% in annual terms. This growth mimics the estimated population growth in the US until 2030. Historically, the percentage net change in the number of supercenters has been greatly higher than population growth, however, we expect this trend to stop as consumers shift their consuming habits. Additionally, the net change in supercenter stores will be positively influenced by a conversion from discount stores to supercenters. From 2013 to 2016, the company converted more than 200 discount stores into supercenters. Supercenters stores offer a wide variety of grocery products along with general merchandise, while discount stores offer a limited variety of food products with a general assortment of merchandise. These stores conversion makes the retailer more resilient to the macroeconomic conditions, as grocery products are less correlated with the state of the economy than other products. Going forward, we predict the discount stores conversions to continue at a slower rate. In our forecast, we considered a net change of 213 stores over our 10-year forecast period. Walmart's Neighborhood Markets, which are ten times smaller than the typical supercenter size, offer 15,000 items compared to the 100,000 items offered in a supercenter. Having reported double-digit growth in these smaller store formats, we believe this is an encouraging sign, which leads to an increase in the number of these stores formats, helping to feed growth to the business. Moreover, Walmart is launching and testing several other smaller formats such as convenience stores and online pickup stores, totalling 61 as the

Exhibit 19: Walmart US' Unit Counts and Net Change in UC

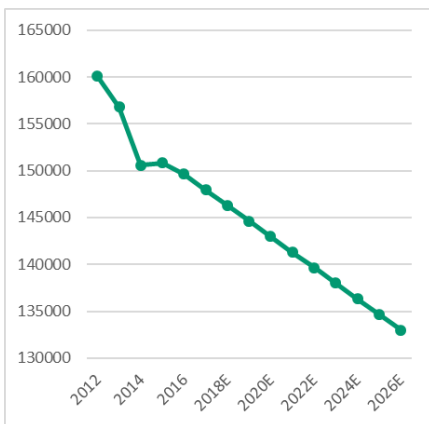


end of October 2017. We projected 200 stores increase of this format until the end of our forecast, which reflects a significant expansion of this format.

US Average Square Footage per Store

Total average square footage per store has been decreasing over the years due to its aggressive expansion in smaller formats. In fiscal 2011 the total average square feet was of 162,198 per store, having gradually decreased to 149,615 square feet in fiscal 2017. We expect the average square footage per store to continue decreasing up to 133,000 square feet by 2026, reflecting a compounded annual decrease rate of 1.17%. This estimate considers not only the substantial growth of the smaller formats but our estimate on Walmart’s conversion of discount stores to supercenters. Discount stores have, on average, less 70,000 square feet than supercenters, and thus, the stores’ conversions will contribute to the decrease in the average size of supercenters.

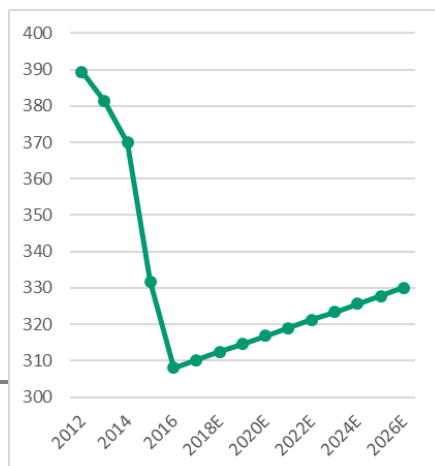
Exhibit 20: Walmart US’ Average Square Footage per Store



Walmart International Segment

Although Walmart operates in different international markets, it consolidates all the items in the same currency without discriminating the revenue per country. For this reason, each item was forecasted in US dollars, as presented in the historical statements. Our forecast takes into consideration, not only the current retailing conditions specific to each country but also future prospects of the countries’ exchange rates. What’s more, as exchange rates depend on several different factors, possible sudden movements in exchange rates may affect Walmart International’s reported revenues, and so, affect its valuation. This is especially true in emerging markets, where the exchange currency volatility is higher.

Exhibit 21: International Segment’s Average Revenue per Square Foot in \$/sq ft



Average Revenue per Square Foot

Walmart’s International revenue per square foot has increased up to 2012 due to strong global performance, reaching \$389 per square foot. From there, the square foot revenues have decreased to \$308 as of fiscal year 2017. This decrease was the result of struggles in most of the international markets, due to different reasons. For example, in the UK, the company has struggled to deliver its strategy, being pushed by an increased competition, and weak economic growth. In Mexico, despite a positive sales growth in national currency terms, the currency devaluation against the US dollar has offset this growth, turning the sales growth negative, in US dollars terms. Regarding Brazil, the country is starting to recover from a recession that did not encourage consumer spending,

and thus, led to low store traffic. Concerning China, the environment has been challenging to deliver the company’s strategy, mainly due to cultural differences. For the other international markets, many different specific contributions resulted in an overall weaker performance compared to the historical values.

For the future, as there are signs of macroeconomic improvements in most of Walmart’s international countries, we expect a moderate growth in revenues per square foot. Our estimate projects revenue per square foot to reach \$330 by the end of the forecast period from the current value of \$308 per square foot, representing a 0.7% compounded annual growth. Our forecast considers a slow improvement in this figure in the first years, and from there, a gradual increase.

Walmart has plans to slow down its expansion in some of its countries like Mexico, Brazil, and China, looking to build a stronger foundation for comparable sales growth. This strategy is likely to support the rise of revenues per square foot. Additionally, Walmart plans to improve its stores’ productivity, which combined with the expected online retail growth, will also help to increase this figure.

Number of Walmart International Stores

Walmart number of international stores increased from 2,734 to 6,363, from the end of fiscal year 2007 to the end of fiscal year 2017. Most of this increase was from Mexico, Brazil, and China. More recently, in the last two years, Central America stores (which includes Costa Rica, El Salvador, Guatemala, Honduras, and Nicaragua) have grown vastly. In our forecast, we projected the store increases for each one of the five major international countries over the 10-year period, and additionally, we forecasted the store net changes for the other countries as a whole.

We estimate the positive growth for Mexico, Brazil, and China to continue in the next five years, at a lower rate than the one observed in the past 5 years, given the company’s plan to decrease its store expansion in these countries. For Canada, we assumed a constant growth, similar to the historical values, as this market has been the most consistent in terms of store increase. For the UK, we projected retail sales to weaken in the next 5 years, and from there, to gradually recover along with macroeconomic conditions. For the rest of the countries, we assumed a consistent growth based on the historical average. Overall, we expect international stores to increase from 6,363 to 6,905, from fiscal year 2017 to fiscal year 2027, representing a CAGR of 0.82%.

International Average Square Footage per Store

Exhibit 22: International Segment’s Unit Counts and Net Change in UC

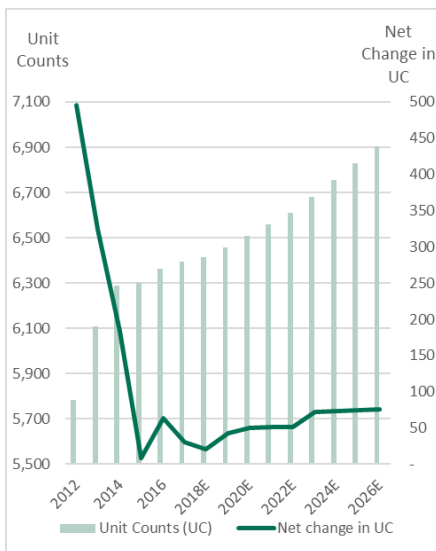
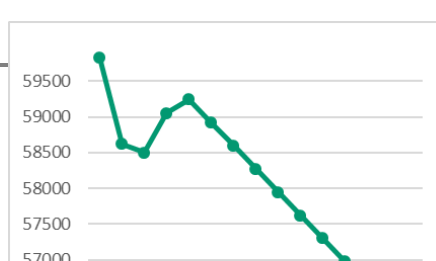


Exhibit 23: International Segment’s Average Square Footage per Store



Historically, the average square footage in Walmart’s International stores has not changed significantly. Particularly in the last 5 years, a marginal decrease in the average square footage per store could be observed, from 59,831 square feet in 2012, to 59,249 square feet in 2016. We expect a decrease in average square footage per store to continue but at a faster pace. We considered a compounded annual decrease of 0.6% in this metric, representing an overall decrease of approximately 3,000 on the average square feet per store over the 10-year forecasted period. To support this forecast, it was observed that there is a global trend of opening smaller stores formats, in a response to consumers’ increasing search for more convenient ways to shop. Additionally, Walmart is resizing and redesigning some of its stores to become more efficient, an example is Brazil’s recent \$320 million plan to restructure its stores. Furthermore, with the rise of online retail, more pick-up stores are expected to open, which will also contribute to the average square feet per store to decrease.

Exhibit 24: Sam’s Club Average Revenue per square feet (\$/sq ft)

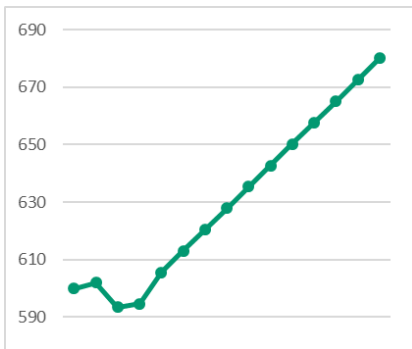
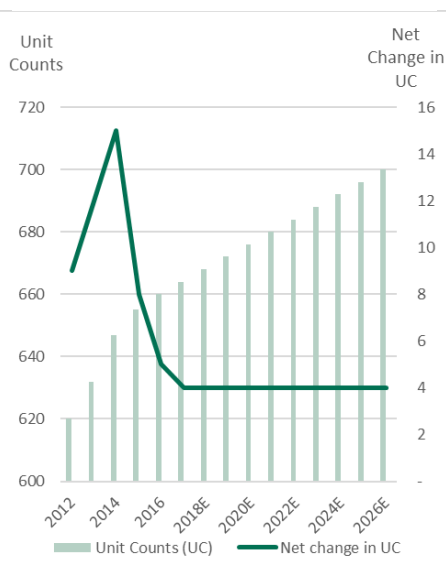


Exhibit 25: Sam’s Club Unit Counts and Net Change in UC



Sam’s Club

Sam’s Club is the smallest contributor of all three segments in terms of net sales, gross profit, and operating income. However, the company has had the most consistent revenue growth, when excluding fuel.

Revenue per Square Foot

Revenue per square foot in Sam’s Club stores has marginally increased over the last 5 years reaching \$606 in fiscal year 2017, from \$581 in fiscal year 2012. In the future, we expect a stronger revenue per square foot as the market conditions are projected to improve, along with online retail growth helping to boost growth.

Number of Sam’s Club Stores

Sam’s Club stores have consistently risen in number since 2010, opening, on average, 8 stores per year. We project the number of store openings to continue but at a slower rate. In our forecast, we projected an **average of 4 store increases per year**, reaching 700 Sam’s Clubs by fiscal year 2027.

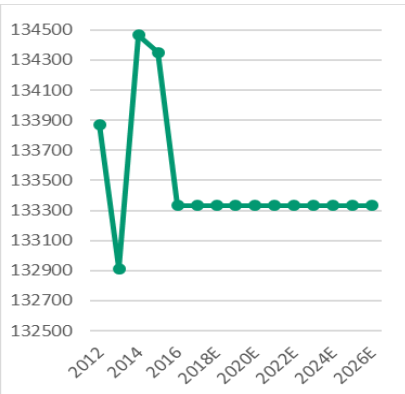
Sam’s Club’s Square Footage per Store

Square footage per store has remained constant over the past years at around 130,000. In our forecast, we assumed this number to remain constant.

Walmart US Gross Profit Margin

In our considerations for future gross margin

**Exhibit 26: Sam's Club
Average sqft per Store**



Historically, Walmart US has had the highest gross profit margin of all three segments. Walmart US's gross profit margin has gradually declined in the recent years, from 26.15% in 2012 to 24.68% at the end of 2016. We expect this course to continue as Walmart is focusing on selling a bigger share of grocery products, which have lower profit margin than other products, therefore, putting pressure on the overall gross margin. Moreover, a large share of Walmart's vendors are Chinese, and they are undergoing a rise in labour costs due to labour shortages, government regulations, and an aging population, leading to more expensive costs of goods to Walmart. The retailer may have to look to other Asian countries in a search for more competitive prices, but as China represents a large share of its suppliers, it will be challenging.

Withal, considerations about stronger supply chain management and economies of scale should also be considered, to offset the trend of decreasing gross profit margins.

International Gross Profit Margin

The overall gross profit rate for Walmart International is lower than that of Walmart US primarily because of its merchandise mix.

Our estimate on Walmart International's gross profit margin was of 25.00%, for the fiscal year 2017, having slightly increased in the last 4 years from 24.54%. We expect this trend to continue as stores become more productive. In our forecast, we estimate a 26.5% of gross margin for this segment, at the end of our forecasting period, gradually increasing from the current value.

Sam's Club's Gross Profit Margin

Sam's Club stores operate with a lower gross profit margin and lower operating expenses as a percentage of net sales than the other segments. Gross profit margins have remained around the same levels for the last 5-year period, estimated at 22%. In our forecast, we assumed this trend to continue.

WACC Approach

To forecast the weighted average cost of capital we had to estimate its components, in particular, the cost of equity, cost of debt, and the company's capital structure. We projected the cost of equity using the CAPM method. For risk-free rate we used the US government bond yield for 10 years at 2.45%, perceived as a risk-free asset. We used the widely accepted 5,5% average for the risk premium, as suggested by common literature. Regarding beta, we used

an average between the beta estimated by company's comparables (re-leveraging for Walmart's capital structure to reach 0.81) and the beta estimated regressing the last 5-years returns against SP500 (reaching a 0.35 beta), reaching a 0.58 beta. Taking these assumptions into consideration, we arrive at a cost of equity of 5.63%. To compute the cost of debt, we projected based on FY 2017 estimated interest rates at 4.93%. For the capital structure, we used 87% as the equity-to-total-value ratio, and so, a 13% ratio for debt-to-total-value. These ratios were computed based on the equity market value (market cap) and current book value of debt as a proxy for the debt market value. Regarding tax rate, we assumed 35%.

Sensitivity Analysis

We computed a sensitivity analysis of Walmart's stock price relative to the WACC and to the terminal growth rate. Regarding the WACC, we are testing its sensitivity to the beta. As an upper bound, we considered a 0.81, correspondent to Walmart's beta by its comparables, resulting in a WACC of 6.41%. We considered for the lower bound Walmart's beta of 0.35, resulting in a WACC equal to 4.22%, which is lower than the one we computed with the considered peers. Regarding the growth rate, we set a confidence interval of 1% given its unpredictability. What we see here is that the price is quite sensible to variations of both values, varying between 76 and 372 dollars per share. The lower price shows a significant variation from our target price (19%), and would reiterate our recommendation from buy to hold (8% of upside). However, most of the computed values wouldn't change our recommendation, which gives us the idea that the valuation is within a reasonable range.

Multiples Valuation

Furthermore, we have calculated Walmart's price based on a P/E multiple valuation, as an additional base for comparison. Our peer group selection comprises five companies that serves as comparables, since they all are retailing companies. We used trailing adjusted P/E ratio to make this assessment and arrived at a share price of \$100.3 for Walmart's stock as of fiscal 2018, which is lower than our estimate of \$127.9, and similar to the stock's current price of \$98.6. Our view is that Walmart is a clear winner among his competitors, being underestimated by its peer's valuation. Walmart has more growth opportunities than the other retailers as it has built an online structure that will allow to capture growth. Moreover, Walmart has shown that is more than a long-term survivor and is now becoming competitive to Amazon which trades at 275x (P/E).





Appendix

Financial Statements

Income Statement	FY 2016 A	FY 2017 A	FY 2018 E	FY 2019 E	FY 2020 E	FY 2021 E	FY 2022 E	FY 2023 E	FY 2024 E	FY 2025 E	FY 2026 E	FY 2027 E
Amounts in millions, USD												
Operational Revenues	482,130	485,873	488,528	491,079	493,967	496,979	499,938	502,824	506,026	509,236	512,388	515,499
Walmart US	298,378	307,833	308,850	309,799	310,678	311,552	312,353	313,081	313,735	314,377	314,942	315,429
Walmart International	123,408	116,119	116,873	117,438	118,397	119,478	120,570	121,656	123,121	124,598	126,086	127,604
Sam's Club	56,828	57,365	59,140	60,160	61,187	62,222	63,265	64,316	65,375	66,442	67,517	68,600
Membership and Other Income	3,516	4,556	3,664	3,683	3,705	3,727	3,750	3,771	3,795	3,819	3,843	3,866
Operational Costs	452,204	456,695	457,601	460,227	463,223	465,894	468,396	471,135	474,119	477,030	479,901	482,783
Cost of Sales	360,992	363,571	365,333	366,423	367,758	369,179	370,555	371,872	373,417	374,963	376,461	377,924
Adjusted SG&A	91,212	93,124	92,268	93,804	95,466	96,715	97,841	99,263	100,702	102,067	103,441	104,859
EBITDA	29,926	29,178	30,928	30,852	30,744	31,085	31,542	31,689	31,907	32,206	32,487	32,716
Depreciation and Amortization	5,821	6,414	6,003	6,035	6,063	6,102	6,145	6,189	6,232	6,287	6,342	6,398
EBIT	24,105	22,764	24,925	24,817	24,680	24,983	25,397	25,500	25,675	25,919	26,145	26,318
Net Interests	2,467	2,267	2,345	2,345	2,345	2,345	2,345	2,345	2,345	2,345	2,345	2,345
EBT	21,638	20,497	22,580	22,471	22,335	22,638	23,052	23,155	23,329	23,574	23,799	23,973
Taxes	-6,558	-6,204	-6,842	-6,809	-6,768	-6,859	-6,985	-7,016	-7,069	-7,143	-7,211	-7,264
Net Income	15,080	14,293	15,738	15,663	15,568	15,778	16,067	16,139	16,261	16,431	16,588	16,709

BALANCE SHEET	FY 2016	FY 2017	FY 2018 E	FY 2019 E	FY 2020 E	FY 2021 E	FY 2022 E	FY 2023 E	FY 2024 E	FY 2025 E	FY 2026 E	FY 2027 E
Amounts in millions, USD												
Current assets	60,239	57,689	61,008	61,247	61,528	61,815	62,093	62,367	62,679	62,990	63,293	63,592
Cash and Cash Equivalents	8,705	6,867	8,099	8,141	8,189	8,239	8,288	8,336	8,389	8,442	8,494	8,546
Net Receivables	5,624	5,835	6,023	6,054	6,090	6,127	6,164	6,199	6,239	6,278	6,317	6,355
Inventories	44,469	43,046	45,041	45,175	45,340	45,515	45,685	45,847	46,038	46,228	46,413	46,593
Other current assets	1,441	1,941	1,845	1,876	1,909	1,934	1,957	1,985	2,014	2,041	2,069	2,097
Non-current assets	139,342	141,136	142,790	143,424	143,959	144,711	145,543	146,385	147,227	148,277	149,347	150,426
Intangible assets	16,695	17,037	17,037	17,037	17,037	17,037	17,037	17,037	17,037	17,037	17,037	17,037
PPE, net & other tangibles	116,516	114,178	115,832	116,466	117,001	117,753	118,585	119,427	120,269	121,319	122,389	123,468
Other non current Assets	6,131	9,921	9,921	9,921	9,921	9,921	9,921	9,921	9,921	9,921	9,921	9,921
Total Assets	199,581	198,825	203,798	204,671	205,487	206,527	207,637	208,753	209,906	211,267	212,640	214,018
Current liabilities	64,619	66,928	70,440	72,532	73,724	73,597	73,076	72,422	72,192	73,412	73,297	74,941
Short-Term Borrowings	2,708	1,099	5,407	6,565	6,765	6,596	5,605	4,503	3,882	4,513	3,944	5,007
Accounts payable	38,487	41,433	39,807	40,250	40,793	40,576	40,845	41,037	41,137	41,338	41,506	41,655
Other Short term liabilities	23,424	24,396	25,226	25,717	26,166	26,425	26,627	26,882	27,174	27,561	27,847	28,278
Long Term Liabilities	51,351	51,362	54,057	55,663	56,577	56,480	56,080	55,578	55,402	56,338	56,250	57,511
Long Term borrowings	38,214	36,015	38,325	39,701	40,485	40,402	40,059	39,629	39,478	40,280	40,205	41,286
Other long term creditors	5,816	6,003	6,388	6,617	6,748	6,734	6,677	6,605	6,580	6,714	6,701	6,882
Deferred tax	7,321	9,344	9,344	9,344	9,344	9,344	9,344	9,344	9,344	9,344	9,344	9,344
Total liabilities	115,970	118,290	124,497	128,195	130,301	130,077	129,157	128,000	127,594	129,750	129,547	132,452
Shareholder's capital	80,546	77,798	76,564	73,739	72,449	73,713	75,743	78,015	79,576	78,780	80,355	78,829
Minority interest	3,065	2,737	2,737	2,737	2,737	2,737	2,737	2,737	2,737	2,737	2,737	2,737
Total equity	83,611	80,535	79,301	76,476	75,186	76,450	78,480	80,752	82,313	81,517	83,092	81,566
Total Equity + Liabilities	199,581	198,825	203,798	204,671	205,487	206,527	207,637	208,753	209,906	211,267	212,640	214,018

Disclosures and Disclaimers

Report Recommendations

Buy	Expected total return (including expected capital gains and expected dividend yield) of more than 10% over a 12-month period.
Hold	Expected total return (including expected capital gains and expected dividend yield) between 0% and 10% over a 12-month period.
Sell	Expected negative total return (including expected capital gains and expected dividend yield) over a 12-month period.

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