UCD Michael Smurfit Graduate Business School

Yale SCHOOL OF MANAGEMENT

US Branded Retail Apparel | American Eagle | April 18th, 2018

American Eagle Outfitters

Aerie and Online Strength pushing price target to $25.32

We believe there is much to like about American Eagle as a stock and forecast 15.63% of upside potential from the current price of $21.90.

Investment Thesis

- **Store Expansion Plans:** AE stores to reach target levels in 2018 while Aerie outlet numbers expand to meet consumer demand

- **Continued Aerie Growth**: Year on year revenues continue rising. Net store openings to increase as AEO hope to capitalize on Aerie's momentum

- **Continued E-Commerce Growth**: Capitalizing on its position as an Online Retail leader vs peers and following URBN's lead. We view this as a key catalyst for revenue growth which the market has underestimated

- **Debt-Free Balance Sheet:** Absence of debt proving a structural advantage for AEO with better flow through of earnings

- **Staying ahead of the Trend:** Good Net Working Capital Management and investments in digital marketing have allowed AEO to avoid stale inventory and keep pace with ever changing consumer and fashion trends

Rating: Overweight

AEO US

Target Price: $25.32

Company Snapshot	
Price	$21.90
Date of Price	April 18th
52 Week Range ($)	10.23 - 22.03
Market Cap	$3.827bn
Fiscal Year End	3rd Feb
Shares Outst. (M)	169.36
Price Target	$25.32

US Branded Retail Apparel Industry

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Five Year Price Performance

Company Overview

American Eagle Outfitters, Inc., is a multi-brand specialty retailer operating in 26 countries. ~87% of revenues come from the United States with the remaining ~13% from international operations. The company has two major brands, American Eagle and Aerie. Other minor brands include Tailgate and Todd Snyder, however, revenue from these brands is negligible with only 5 stores total between them.

AEO provides clothing, accessories, and personal care products under the American Eagle and Aerie brands. The company also offers jeans, and other apparel and accessories for men and women; and intimates, active wear, and swim collections, as well as personal care products for women. In addition, it offers sports apparel under the Tailgate brand and menswear products under the Todd Snyder New York brand name

American Eagle (AE)

Founded in 1977, American Eagle primarily targets 15 – 25 year olds. The target group is mainly high school to college students which means a focus on adapting to ever changing expectations of new generations of customers. They pride themselves on supplying the highest-quality goods with a history rooted in denim. The brand sources substantially all of its merchandise from non-North American suppliers.

Aerie

Aerie is a female lifestyle brand which has been in operation for over 10 years. The target market is young women in the 15-25 range however there has been increased traction in recent years from the 30/40 year old demographic. The mission of the brand is to make “all girls feel good about their REAL selves”. The product line is predominantly intimates, apparel, active wear and swim collections.

The brand is socially active and appears in tune with societal trends. Its #AerieREAL campaign which advocates for body positivity and empowerment of all women. In addition, the company does not retouch any of its models in advertising campaigns and believes that this approach resonates with today’s consumers. The brand is sold as a shop-in-shop in American Eagle stores, online through the American Eagle website, and in stand-alone retail stores.

Other Brands

Tailgate

Tailgate is a vintage, sports-inspired apparel brand with a college town store concept. As of February 3, 2018, the Tailgate brand operated 4 standalone stores.

Todd Snyder New York

A premium menswear brand, as of February 3, 2018, the Todd Snyder brand operated 1 stand-alone store.

Omni-Channel Approach

The company reports all brands as one business segment as it believes all channels are intertwined. Their approach to customer engagement is described as "omni-channel" as they aim to provide a seamless customer experience between physical stores and digital channels.

There has been significant investment in technology in recent years to back this up, all with the aim of maximising store inventory exposure to digital customers. The company allows for the customer to order door-to-store, reserve online and pick up in store, return digital purchases in store and to look up inventory levels.

Industry Outlook/Environment & Macro Overview

The apparel industry has gone through a relatively large disruption in recent times with firms now supporting two distinct sales channels in in-store and digital. Technology has been the main disruptor of the channel economics of this industry. For the past several years most apparel retailers have faced headwinds with a sluggish economy and stagnant wage growth.

Today, the winds have shifted and many of these macro-factors are now blowing in favour of the apparel industry. The economy is strong with US GDP growing 2.9% y-o-y in recent years, the Fed raising rates to keep the economy from overheating, unemployment has been low for some time, wages are growing and the recent tax stimulus means consumers have more disposable income.

We believe that American Eagle has positioned itself well for the current environment. The company has no debt on its balance sheet, this capital structure allows for financial flexibility and greater flow through of cash. It has a diversified product offering and is positioned well to take advantage of continued customer migration to digital sales platforms while continually aligning itself with consumer values and expectations. All of these result in a strong business model which should allow the company to withstand tough times and capitalise on growth opportunities. We believe that the stock has much to offer as we will discuss below.

Investment Thesis – What's Driving Revenue

1) **Store Expansion -** AEO has plans for 10 net openings in 2018. The company is continually closing unproductive stores as well as trying to develop new concept stores in an attempt to improve the performance of its store base. We believe that this approach should capture more consumers and lead to more productive stores.

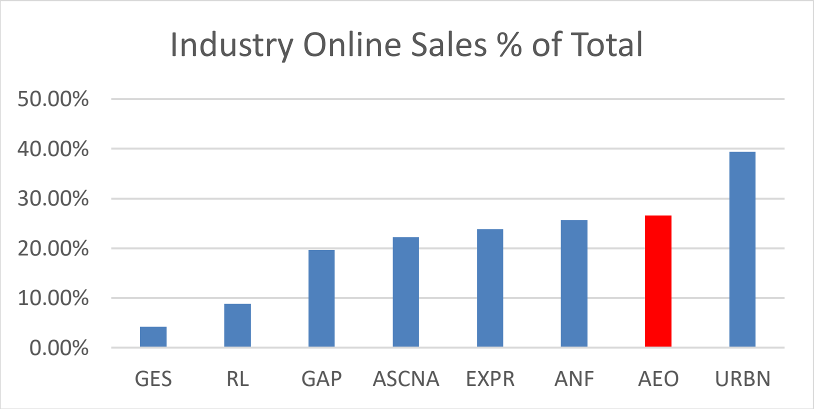
2) **Aerie -** The brand has experienced comparable sales growth of 27% Y-o-Y in 2017 and 23% in 2016 showing strong growth which we expect to continue as they expand the brick and mortar store base. The brand markets itself as socially conscious and active, appealing to their target market. This should lead to continued popularity with 'generation-z' customers.

3) **Online Focus –** There is much room for growth in digital as AEO grows to rival peer trailblazer URBN in online sales. Online revenues made up ~26% of total sales in 2017, up from 22% a year ago. The company invested $34.1m in information and e-commerce respectively in 2017. We believe this will position AEO favourably for the ongoing migration of consumers to online. AEO made major capital expenditures to build distribution centres in 2013&14 to provide a strong platform from which to springboard sales up to levels akin to peer group online leader, Urban Outfitters. We believe the market has underestimated the room for upside in the online space, a key growth driver.

4) **Financial Landscape –** Their debt free balance sheet allows full flow through of earnings. A strong cash balance continues to fund capex requirements, alleviating the pressure to raise debt. They paid out $89m in dividends repurchased 6 million shares in 2017 for $88m resulting in a total dollar return to shareholders of $176m. We interpret this as management viewing the stock as cheap and an opportune moment to repurchase rather than being due to a lack of profitable investment opportunities. This is confirmed by continued investment in their digital sales platform and expansion of their store base.

Revenue Forecast and Sales Analysis

Online: AEO's online segment is currently at the nominal revenue levels and proportion that URBN were in 2013. Going forward we expect them to follow at the same CAGR of growth as URBN have from 2013 to present. AEO have $34.1M of capex going into technology for their digital platform this year. We forecast this level of digital spend to persist for reasons that follow in our capex discussion.



The breakdown here shows Urban Outfitters to a be a leader among coverage peers in the E-Commerce space with AEO its nearest competitor. Going forward we use URBN's online expansion as a proxy for how AEO's revenue from online will behave. Given their similar profiles, we believe that AEO should behave as URBN has, particularly when you consider its current market position, recent online revenue expansion and continued capex investment into their digital platform. As such we break down American Eagle into its two main brands and compare them to how Urban outfitters performed to give us an idea of how AEO as a whole will perform going forward.

American Eagle – The AE segment is now at the same nominal online revenue levels that URBN reached in 2013. We forecast that AE will perform over the next 5 years as Urban Outfitters did from 2013 with an average increase in online revenue of $159.93M per year when adjusted for inflation. This is our best estimate taking into account minor deviations above and below average numbers over the forecast horizon.

Aerie – Leading on from the above, and using the same assumptions, we forecast that Aerie's online growth will behave as Urban Outfitters did for the 5 year period beginning in 2005. Aerie is currently recording online sales figures of almost the exact same magnitude that URBN did in 2005. Applying this growth to Aerie, we forecast and average yearly increase in online sales of $78.63M when adjusted for inflation. The results of these forecasts can be seen in the table below.

		2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
AE	Online	486.9	506.0	600.6	721.3	879.5	1029.4	1179.3	1329.1	1479.0	1628.9
	growth rate		3.9%	18.7%	20.1%	21.9%	17.04%	14.56%	12.71%	11.28%	10.13%
Aerie	Online	42.3	44.0	59.4	89.1	131.4	210.0	288.7	367.3	445.9	524.6
	growth rate		3.90%	35.03%	50.06%	47.41%	59.83%	37.44%	27.24%	21.41%	17.63%

In-Store

The growth in this section is primarily driven by the increased number of stores as the company takes advantage of the rapidly growing Aerie division. We forecast 5 net AE openings in 2018 and 5 Aerie openings at a cost of $1.87M per store as per the breakdown that will follow in our capex section. These forecast are as per midpoints of ranges given by management in their discussion of store openings in their most recent 10K. Following an analysis of actual net store openings vs mgmt. projections for planned openings from the last 5 years' worth of 10K filings, we found that they had an average underestimation of 13 net store openings over the course of this period. It included a number of years with large estimation errors but we felt it prudent to include these as they are valid data points. These additional 13 stores in 2018 will be added to the Aerie brand as we feel AE will be plateauing at the 938 store mark. These will provide an additional ~$2.5M of revenue per store for the AE brand and ~$3.3M of revenue per store for the Aerie stores as per the analysis that will follow.

AE's in store revenue is forecasted to grow in line with projected store openings which total 5 this coming year before a stabilization at 938 for the foreseeable future. We believe that this is the best estimate for American Eagle store openings given that it has had net zero openings from 2009 to 2018. Our best estimate for revenue per store going forward is to allow the recent 5 year CAGR of -1.03% to persist. While AE has been losing revenue in store, it has been gaining via its online platform and as a result the AE brand is predicted to grow revenues as per the table below on the basis of the aforementioned assumptions.

For Aerie store openings we wanted to find a reasonable proxy for the rate at which a company's more recently launched brand might grow alongside its more mature 'parent' brand. For this, we analysed how Hollister was able to grow alongside Abercrombie & Fitch. We forecast that on average, Aerie will grow its store count by an average of 18 net openings per year for the next 5 years. This projection is deduced from how Hollister's store count grew for the 5 years beginnings in 2002 when they had roughly the same as Aerie do now. Given our forecast for 23 net opens in 2018, this means a further 15.5 per year from 2019-2022 which we will alternate as 15 and 16 per year for this period.

We applied an adjustment factor of 0.5 to the Hollister store growth numbers to arrive at the 18 per year average for Aerie because Aerie is targeted at females while Hollister targets both a male and female audience. We then added a further adjustment factor of 0.5 because Abercrombie & Fitch (Hollister's 'parent company') had roughly half as many stores as American Eagle (Aerie's 'parent') currently does yielding a total discount factor of 25%. We believe this to be the best representation and subsequent estimate of how Aerie will fare in the immediate future.

		2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
AE	In store	2554.4	2514.3	2604.3	2491.5	2422.7	2435.6	2385.9	2361.4	2337.2	2313.2
	growth rate		-1.57%	3.58%	-4.33%	-2.76%	0.54%	-2.04%	-1.03%	-1.03%	-1.03%
	No. of Stores	944	955	949	943	933	938	938	938	938	938
	Rev per Store	2.71	2.63	2.74	2.64	2.60	2.57	2.54	2.52	2.49	2.47
Aerie	In store	222.2	218.6	257.6	308.0	362.0	440.9	493.9	550.8	605.0	663.3
	growth rate		-1.60%	17.84%	19.55%	17.55%	21.81%	12.01%	11.53%	9.84%	9.62%
	No. of Stores	122	101	97	102	109	132	147	163	178	194
	Rev per Store	1.82	2.16	2.66	3.02	3.32	3.34	3.36	3.38	3.40	3.42

These store figures were multiplied by the revenue per store figure which is outlined above. As you can see there has been a recent upward trend in the revenue per store figures. To assess how Aerie might fare going forward we also analysed how Urban Outfitter's per store revenue behaved over the same time period starting in 2005. They experienced a 0.58% CAGR and we believe this to be an accurate representation of how Aerie's per store revenue numbers will develop. We forecast a 0.58% CAGR for Aerie's revenue per store over our forecast period.

Total Revenue

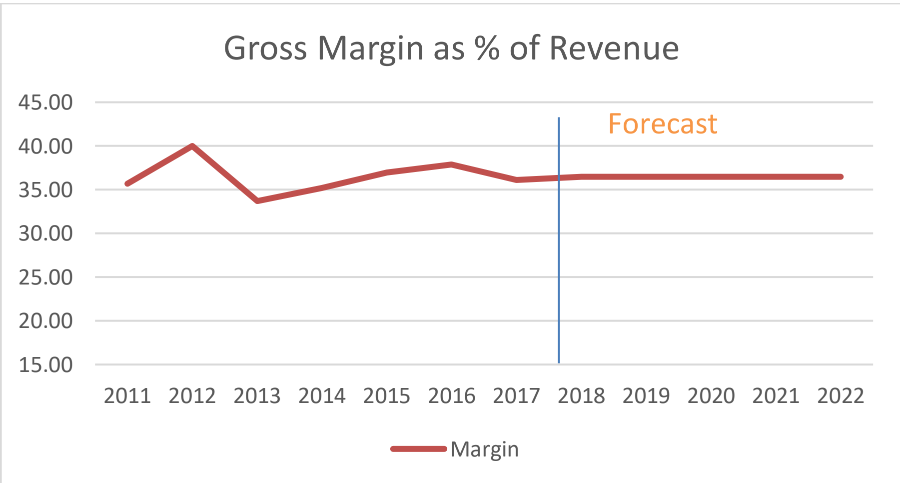
Putting all of this together you can see our best estimate for total revenue growth with the accompanying breakdown in the table below.

		2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
AE	In store	2554.4	2514.3	2604.3	2491.5	2422.7	2435.6	2385.9	2361.4	2337.2	2313.2
	Online	486.9	506.0	600.6	721.3	879.5	1039.4	1199.3	1359.3	1519.2	1679.1
	Total	3,041.3	3,020.3	3,204.8	3,212.8	3,302.1	3475.1	3585.3	3720.7	3856.4	3992.4
	growth rate		-0.69%	6.11%	0.25%	2.78%	5.24%	3.17%	3.78%	3.65%	3.53%
Aerie	In store	222.2	218.6	257.6	308.0	362.0	440.9	493.9	550.8	605.0	663.3
	Online	42.3	44.0	59.4	89.1	131.4	210.0	288.7	367.3	445.9	524.6
	Total	264.5	262.6	317	397.1	493.4	651.0	782.6	918.1	1051.0	1187.8
	growth rate		-0.72%	20.72%	25.27%	24.25%	31.93%	20.22%	17.32%	14.47%	13.02%
AEO	In store	2776.6	2732.9	2861.8	2799.5	2784.6	2876.6	2879.8	2912.3	2942.3	2976.5
	Online	529.2	550.0	660.0	810.4	1010.9	1221.4	1432.0	1642.5	1853.1	2063.6
	Total	3305.8	3282.9	3521.8	3609.9	3795.5	4126.0	4367.8	4638.9	4907.4	5180.2
	growth rate		-0.69%	7.28%	2.50%	5.14%	8.71%	5.86%	6.21%	5.79%	5.56%

Margin Analysis

Gross Margin

Gross margin has been relatively stable in recent years. There was some volatility in 2012 which caused margins to decrease by just over 6% (40% to 33.7%). We consider the past volatility a function of a spike in cotton and poor inventory management in that time period. These are issues which management appear to be better prepared for now. As such, we have taken the 7-year historical average gross margin of 36.51% for our projection period as we forecast stable cost margins going forward. This implies a COGS of 63.49% of revenue for our forecast horizon.



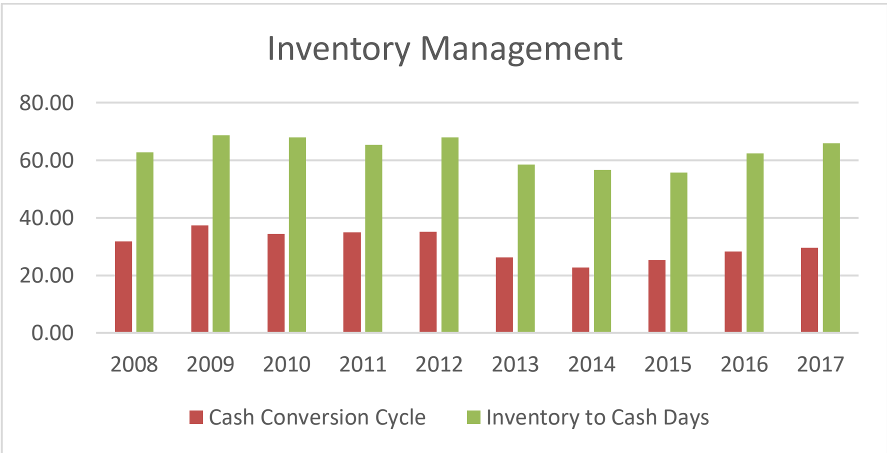
The price of cotton is the main driver of COGS. The spike seen in the figure below was caused by a supply shortage and panic buying. Our best judgement of market conditions lead us to believe that the likelihood of similar situation occurring is small.

Source: Trading Economics

The second factor which we considered was the company's inventory management. They addressed the drop in in gross margin in their 2013 10-K:

"Continued competitive pressures and a challenging macroeconomic environment led to increased markdown rates…"

We believe that the company faces a more positive macroeconomic environment both domestically and abroad. They have a strong competitive position in our opinion given the recent focus on their omni-channel strategy and social awareness programs which should continue to resonate with their target market. In addition, the company leverages data analytics to drive decision making, including in their inventory management. We see this as a major advantage versus earlier years as technology will increase the accuracy of inventory levels and help to stabilise the cash conversion cycle. While future markdown rates are difficult to predict, we see this approach as a benefit which should lead to gross margins near their historical average.



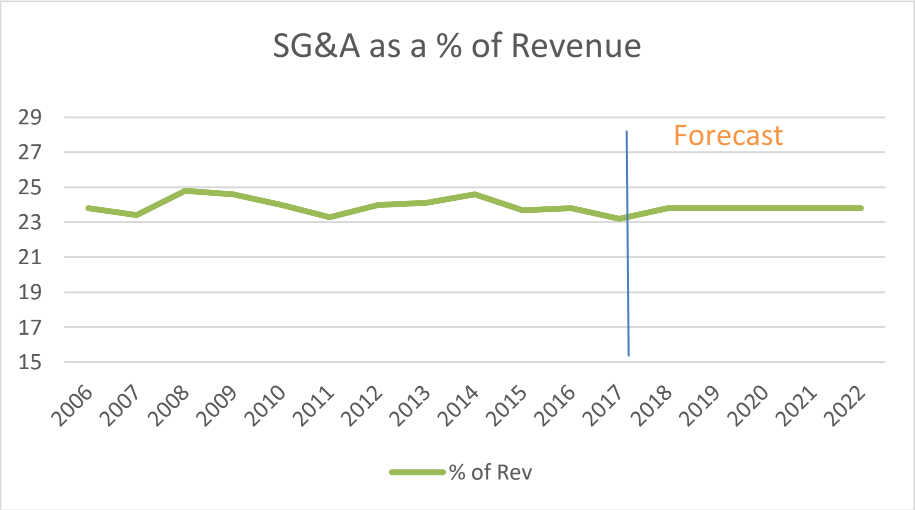
Furthermore, the company has a diversified supply chain which should help guard against unforeseen events and shocks to the gross margin.

"We sourced merchandise through approximately 300 vendors located throughout the world … did not source more than 10% of our merchandise from any single factory or supplier … we do not maintain any exclusive commitments to purchase from any one vendor"

Operating Margin

SG&A consists of compensation and employee benefit expenses, including salaries, incentives and related benefits. It also includes advertising costs, supplies for stores and their home office. It does not include rent and utilities related to stores, operating costs of distribution centres, and shipping and handling costs related to e-commerce operations.

The components included in SG&A are variable and significantly influenced by the level of sales. As such, we anticipate that SG&A expense will move as revenue does in future. The minor downtrend in the last 3 years amounts to only a fraction of a percent and any deviations from the average going forward will have a negligible impact on our final valuation. As the graph below shows, SG&A has been a relatively constant proportion of revenue at 23.81% historically. We forecast that it will continue to grow in line with revenues at this constant proportion.

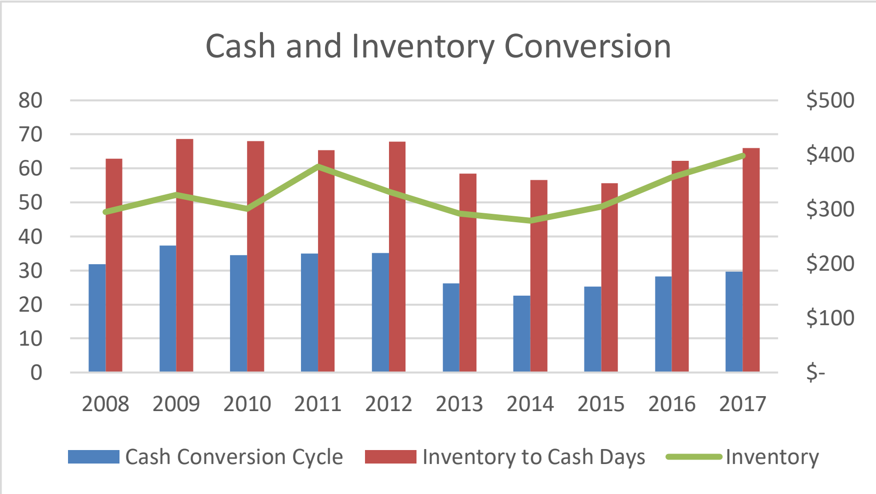


Since 2010, AEO has increased its yearly advertising spend from $64.9m (2.19% of revenue) to $129.8m (3.42%) in 2017. Given management's attitude towards omni-channel marketing, particularly in the online space, we expect further growth of this item to be driven by revenue growth. The other component of SG&A which is disclosed is share based compensation, which is extremely volatile. It ranges between $0.3m and $30m yearly.

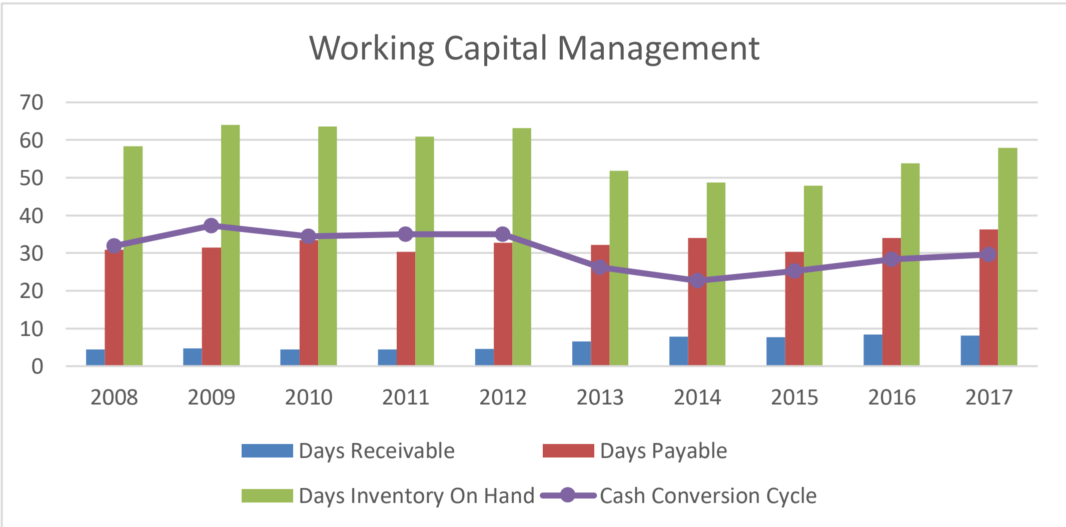
However, given the evidence from the graph above, we do not see future costs or volatility associated with advertising and share based compensation impacting SG&A margins significantly. Management has a proven ability to keep SG&A within a predictable range, even during recessionary times and with varying amounts of share based compensation. Therefore, we will take SG&A to be 23.81% of sales going forward, which is the historical average.

Net Working Capital

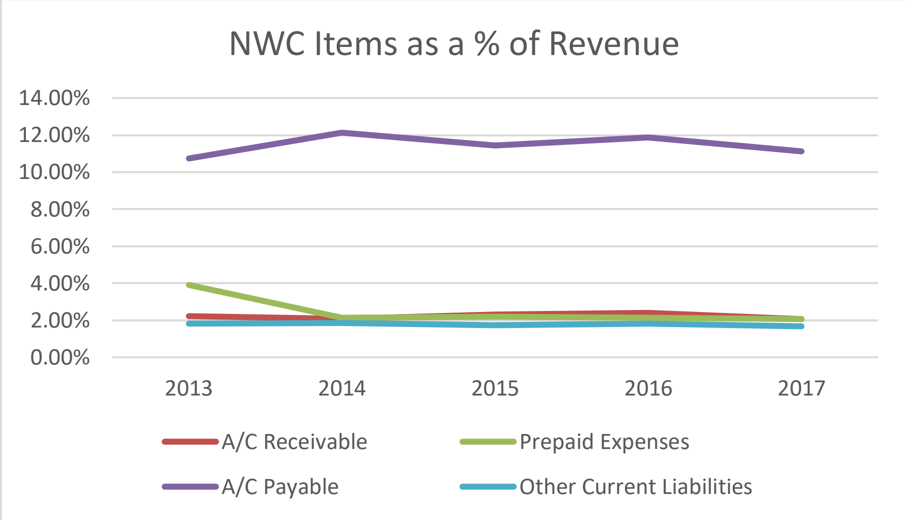
The main variable inputs into net working capital are cash and inventory. Going forward, cash will grow as a function of revenue. Given the stable levels of capex we forecast for our horizon, we believe cash levels growth will mimic the rate of revenue growth barring any unforeseen emergency capital expenditure requirements. AEO has a proven track record of managing its inventory and working capital quite well as can be seen from both graphs below. We believe this will continue into the future as the firm expands Aerie stores to meet consumer demand



Below we can again see evidence of how AEO has diligently managed its working capital, with steady figures throughout the last 10 years for Days Payable, Receivable and Inventory on hand. It has been disciplined and not over-exerted itself or gotten caught with unwanted stock. Management have stressed this as a constant thought and they address the coming years with the same appropriate caution. As mentioned above, Inventory is expected to rise in line with revenue in the coming years.



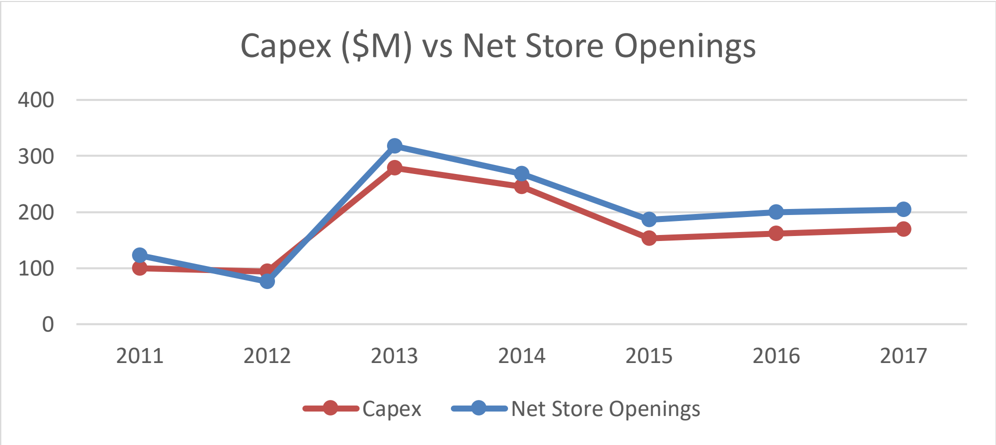
Other line items contained in net working capital are accounts receivable, accounts payable, prepaid expenses and other current liabilities. We analysed their relationship with revenue in the past and found a stable relation as seen below. Going forward we anticipate this consistency to persist and forecast future values of each these line items using the recent 5 year average proportions of total revenue.



We also have no reason to believe the company will take on any short term debt as the company is entirely debt free and with strong cash levels, should have no requirements for borrowing short of any unforeseen emergency. As such we forecast short term debt levels to remain at zero going forward.

Capital Expenditure

Capex for the group amounted to $169.5 million for 2017 with the total planned spend for 2018 of between $180 and $190 million as per guidance from the recent earnings call. Below we can see over the past 7 years how strongly linked the change in capex is to the number of net store openings. As stated in the revenue breakdown, we project 18 new stores on average (23 for AE and Aerie in 2018 and 15.5 per year thereafter (alternating 15 and 16)) for the group using Hollister as a proxy. This results in Capex for store related investments to total $58.31m in 2018 with the remainder of our forecast window broken down below.



Management only disclose the combined total of Store Capex which include both new openings and remodelling. We used simultaneous equations for two years of data to identify the cost of each new store and each remodel. A new store requires $1.87 million while a remodel requires $0.32 million.

The average number of remodels per year was on average 48 with a low variance, using seven years of data. As such, we project the same number of store remodels to continue each year for our forecast window.

For distribution & home office, we took the 10 year average and used this going forward. This was quite stable apart from two large spikes in 2013 and 2014 which cost $83.2m and $76.2m respectively. These were due the building of large distribution centres to enable the transition to an omni-channel business model. We believe that these were one-off investments and would not be repeated again during our forecast window.

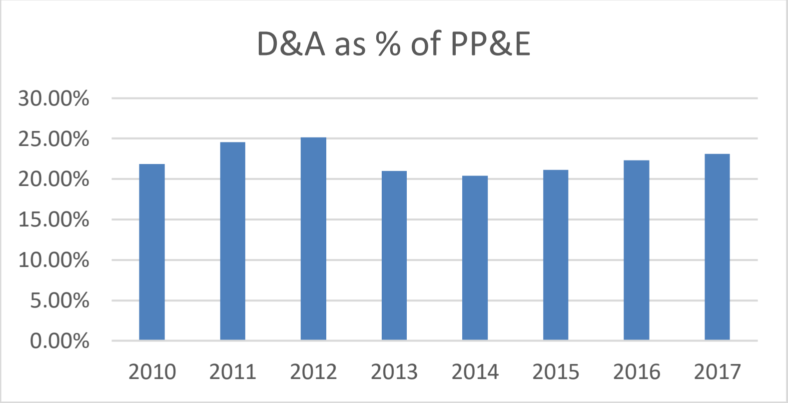
Digital Growth has fluctuated a lot in recent years. It peaked at ~$70m in 2013 but has declined to $34.1m in 2017. Our best estimate is that 2017 levels will persist on average, with fluctuations which we cannot account for. Our reasoning is that while AEO has a strong online presence, it still lags behind the industry leader, URBN, which we believe shows that the company has room to grow. The company has already picked a lot of the low hanging fruit, such as building an app and implementing large scale information technology. We believe that digital spend will not rise sharply because many of the large expenditures have been completed already. As such, we project digital growth capex to remain at 2017 levels on average.

Maintenance capex has remained a relatively constant percentage of PP&E over the past 5 years, at 9.09%, which we anticipate persisting as there are no obvious factors which should alter this.

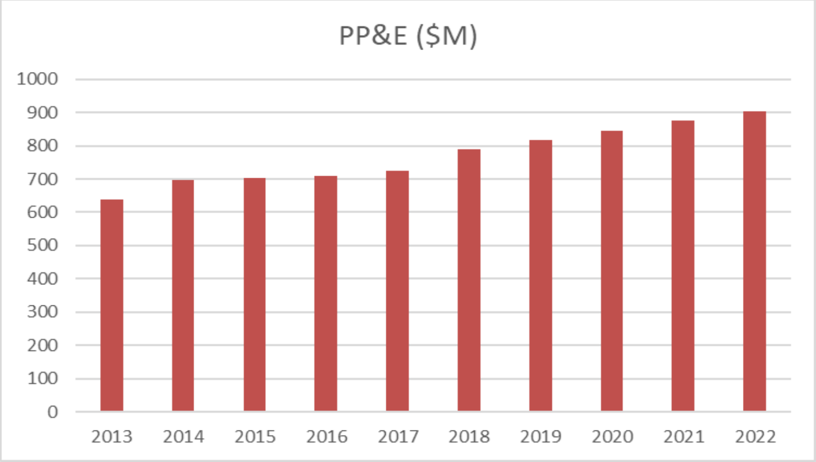
Projections	**2018**	**2019**	**2020**	**2021**	**2022**
Store Capex					
Number of Store Openings	23	15	16	15	16
Cost to Open	1.87	1.87	1.87	1.87	1.87
New Store Capex	43.11	28.12	29.99	28.12	29.99
Yearly Remodels	48	48	48	48	48
Cost to Remodel	0.32	0.32	0.32	0.32	0.32
Remodel Capex	15.20	15.20	15.20	15.20	15.20
Total Store Capex	58.31	43.31	45.19	43.31	45.19
Distribution & Home Office					
Historical Average	26.78	26.78	26.78	26.78	26.78
Digital Growth					
Historical Average	43.50	43.50	43.50	43.50	43.50
Maintenance Capex					
PP&E	767.31	795.43	825.42	853.53	883.52
Historical Percentage	9.09%	9.09%	9.09%	9.09%	9.09%
	69.77	72.32	75.05	77.60	80.33
Total Capex	**198.35**	**185.92**	**190.52**	**191.20**	**195.80**

PP&E and D&A

Depreciation is directly linked to PP&E levels. Historically D&A has been around the 21.61% mark of total PP&E which itself is a function of Capital Expenditure. As Capex grows, PP&E grows and so, Depreciation grows. As such, we forecast D&A to continue to be this constant percentage of the growing PP&E base going forward.



Based on our capex breakdown above, we determined that the average cost to develop a new store was $1.87m. As such, going forward we see PP&E expanding as a function of future new store openings. The dollar values for future PP&E and Depreciation & Amortization can be seen in our detailed DCF model at the end of the report.



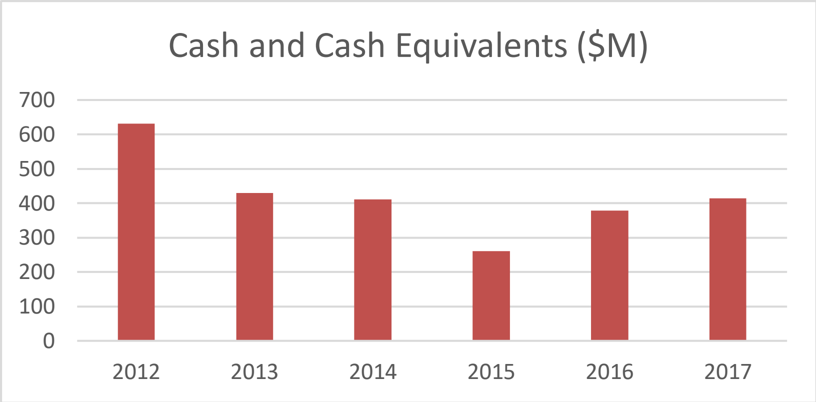
Valuation

Debt

American Eagle has the unique property of not having any debt on its balance sheet. We view this as a significant multi-year structural advantage vs peers in its coverage group. Leading on from the lack of leverage on the balance sheet and its comfortable cash situation, we forecast that there will be no debt on the balance sheet for the foreseeable future, barring extraordinary events which would require significant borrowing.

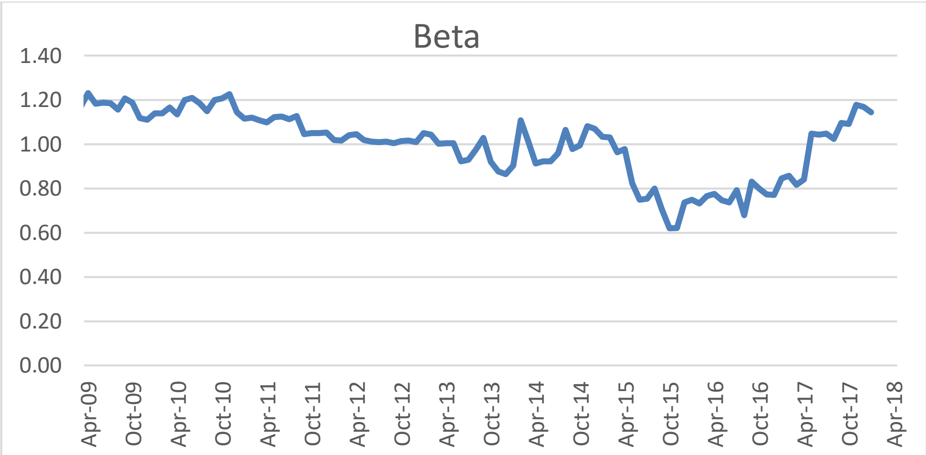
We believe that free cash flow will be sufficient to fund anticipated capital expenditures, dividends and working capital requirements. The company's uses of cash are generally for working capital, new store builds, remodelling of existing stores, information technology, digital investments, distribution centre improvements and the return of value to shareholders.

Cash continues to grow nicely with revenues and we believe there are no extraordinary capex requirements which would be in excess of the current growing cash stockpile. In the event of an unforeseen emergency requirement for funds, the company does have a revolving credit facility which allows it to borrow up to $400m which is scheduled to expire at the end of 2019.



Beta

We calculated our betas using regression analysis of the excess returns on the American Eagle stock vs the Fama French Market Excess Returns data as per the FF Data Library. This was performed using 60 month windows and we rolled our beta from 9 years ago (March 2009) forward to the present day. In doing this, it encompasses data from 5 years prior to each date in our monthly rolling window.



The average of the rolling beta estimates over our window is exactly 1 while the most recent estimate is 1.14 as of April 2018. There has been a recent uptrend in the beta value; we believe that this is the stock recovering toward its historical average after a period of low betas caused by underperformance versus the market. As such we have chosen the current value of 1.14 as we believe it to be a fair approximation of past and current relation to market performance.

Risk free rate

For our risk free rate we have opted to use the yield on the 10 year US government bond (currently 2.860% as of Wednesday April 18th) and adjust this downward by 1% for the minor inherent risk premium associated with the bond. Following this, as it is a forward looking analysis, we have adjusted the rate upward by 0.5% to reflect our expectations for impending interest rate hikes. Taking all of this into account this reached our risk-free rate figure of 2.36%

Market Risk Premium

We took our market risk premium to be 4.2%. This was taken from a study by Aswath Damodaran on the historical market risk premium of stocks vs US treasury bonds from 1928-2012. We chose to use this number as adjusting it for the recent 5 years of market data would amount to nothing more than insignificant white noise and any change in the number would be negligible. As such our market risk premium is 4.2%.

Cost of Equity/Cost of Capital

Combining the above information together we used the CAPM formula to acquire our cost of equity for the firm of 7.148%. Given the zero debt balance, this cost of equity also functions as our weighted average cost of capital and so too, our effective discount rate for our projected free cash flows.

Tax

Excluding one-time charges, the effective tax rate was 28.9% for last year. Guidance from the March earnings call indicated the firm expects annual and first quarter effective tax rates are planned to be approximately 25%. This is in keeping with our estimate of 25.75% as per PWC's 2018 Tax Outlook, which combines federal and state taxes following the introduction of the tax stimulus package which we will use again here going forward. Management provided guidance that their effective tax rate for the year would be in the mid-20s which we take as further support for our tax rate estimate.

PV of FCFs and TV

Our forecasted free cash flows, projected using all of our forecasts and assumptions above can be seen in our spreadsheet below. They were discounted using our cost of capital of 7.15% as per above. Our terminal value was calculated in the normal fashion using our terminal growth figure of 2.16%, calculated as a weighted average forecast for inflation in the geographies in which AEO operates using IMF and FOMC projections. Adding the PV of all our cash flows together we reached our valuation of $25.32 for American Eagle Outfitters. Comparing this to the current market share price of $21.90, this offers 15.63% of potential upside/downside and recommend an overweight rating for AEO. AEO has previously traded up as high as the $31.21.

In order to assess where our value differed from the market, we reviewed our assumptions and altered the inputs to our model. This entailed reducing our online growth to zero, slowing our store openings to 5 in 2018 with zero net openings for the remainder of our forecast period. We adjusted our revenue per store by doubling the speed of decline for in store AE revenue and applying this same decline for Aerie which would imply a distinct turnaround from recent years growth. We believe this can be attributed to a fear of Amazon and other pure play online retailers taking hold in the apparel market. Applying these alternate assumptions get us within the five day trading range for AEO on the day of this report. This is where we believe the market has mispriced AEO. We are confident in our own assumptions and, as such, have issued an overweight recommendation with a target price of $25.32.

	Historical Period					Projection Period				
	2013	**2014**	**2015**	**2016**	**2017**	**2018**	**2019**	**2020**	**2021**	**2022**
Revenue	3305.8	3282.9	3521.8	3609.9	3795.5	4126.0	4367.8	4638.9	4907.4	5180.2
% growth rate		-0.69%	7.28%	2.50%	5.14%	8.71%	5.86%	6.21%	5.79%	5.56%
AE	3041.3	3020.3	3204.8	3212.8	3302.1	3475.1	3585.3	3720.7	3856.4	3992.4
% growth rate		-0.69%	6.11%	0.25%	2.78%	5.24%	3.17%	3.78%	3.65%	3.53%
In-Store	2554.4	2514.3	2604.3	2491.5	2422.7	2435.6	2385.9	2361.4	2337.2	2313.2
% growth rate		-1.57%	3.58%	-4.33%	-2.76%	0.54%	-2.04%	-1.03%	-1.03%	-1.03%
Online	486.9	506.0	600.6	721.3	879.5	1039.4	1199.3	1359.3	1519.2	1679.1
% growth rate		3.93%	18.69%	20.09%	21.94%	17.04%	14.56%	12.71%	11.28%	10.13%
Aerie	264.5	262.6	317.0	397.1	493.4	651.0	782.6	918.1	1051.0	1187.8
% growth rate		-0.72%	20.72%	25.27%	24.25%	31.93%	20.22%	17.32%	14.47%	13.02%
In-Store	222.2	218.6	257.6	308.0	362.0	440.9	493.9	550.8	605.0	663.3
% growth rate		-1.60%	17.84%	19.55%	17.55%	21.81%	12.01%	11.53%	9.84%	9.62%
Online	42.3	44.0	59.4	89.1	131.4	210.0	288.7	367.3	445.9	524.6
% growth rate		3.90%	35.03%	50.06%	47.41%	59.83%	37.44%	27.24%	21.41%	17.63%
COGS	2191.8	2128.2	2219.1	2242.9	2425.0	2619.8	2773.3	2945.4	3115.9	3289.1
as % of Sales	66.30%	64.83%	63.01%	62.13%	63.89%	63.49%	63.49%	63.49%	63.49%	63.49%
Gross Profit	1114.0	1154.7	1302.7	1366.9	1370.5	1506.3	1594.5	1693.5	1791.5	1891.1
Gross Margin	33.70%	35.17%	36.99%	37.87%	36.11%	36.51%	36.51%	36.51%	36.51%	36.51%
Op Expenses	972.9	998.9	982.9	1035.5	1067.7	1191.3	1261.1	1339.3	1416.8	1495.6
SG&A	796.5	806.5	834.7	857.6	879.7	982.6	1040.2	1104.7	1168.7	1233.6
Other Op Exp	176.4	192.4	148.2	177.9	188.0	208.7	220.9	234.6	248.2	262.0
Operating Profit (EBIT)	141.1	155.8	319.9	331.5	302.8	315.0	333.5	354.2	374.7	395.5
Operating Margin	4.27%	4.74%	9.08%	9.18%	7.98%	7.63%	7.63%	7.63%	7.63%	7.63%
Current Assets	923.6	828.0	723.4	901.2	968.5	1076.6	1139.7	1210.5	1280.5	1351.7
Cash & Cash Equivalents	428.9	410.7	260.1	378.6	413.6	449.6	476.0	505.5	534.8	564.5
A/C Receivable	73.9	67.9	80.9	86.6	78.3	91.3	96.6	102.6	108.6	114.6
Inventory	291.5	279.0	305.2	358.4	398.2	432.9	458.3	486.7	514.9	543.5
Prepaid Exp & Other	129.2	70.5	77.2	77.5	78.4	102.8	108.9	115.6	122.3	129.1
Current Liabilities	415.5	459.1	463.7	493.8	485.2	546.1	578.1	614.0	649.6	685.7
A/C Payable	355.0	398.2	402.7	428.0	421.7	472.6	500.3	531.3	562.1	593.3
ST Debt	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Other Current Liabilities	60.5	60.9	61.0	65.7	63.6	73.5	77.8	82.7	87.5	92.3
Net Working Capital	508.1	368.9	259.7	407.4	483.3	530.5	561.6	596.4	631.0	666.0
as % of Sales	15.37%	11.24%	7.37%	11.29%	12.73%	12.86%	12.86%	12.86%	12.86%	12.86%

	Historical Period					Projection Period				
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Sales	3305.8	3282.9	3521.8	3609.9	3795.5	4126.0	4367.8	4638.9	4907.4	5180.2
COGS	2191.8	2128.2	2219.1	2242.9	2425.0	2619.8	2773.3	2945.4	3115.9	3289.1
Gross Profit	1114.0	1154.7	1302.7	1366.9	1370.5	1506.3	1594.5	1693.5	1791.5	1891.1
Op Exp	972.9	998.9	982.9	1035.5	1067.7	1191.3	1261.1	1339.3	1416.8	1495.6
SG&A	796.5	806.5	834.7	857.6	879.7	982.6	1040.2	1104.7	1168.7	1233.6
Other Op Exp	176.4	192.4	148.2	177.9	188.0	208.7	220.9	234.6	248.2	262.0
Op Profit (EBIT)	141.1	155.8	319.9	331.5	302.8	315.0	333.5	354.2	374.7	395.5
EBITDA	275.1	298.1	468.7	489.7	470.2	480.8	505.3	532.5	559.1	586.4
% Margin	8.32%	9.08%	13.31%	13.56%	12.39%	11.65%	11.57%	11.48%	11.39%	11.32%
Capex	278.5	245.0	153.3	161.5	169.5	198.4	185.9	190.5	191.2	195.8
Store	98.4	98.6	50.1	74.3	88.5	58.3	43.3	45.2	43.3	45.2
Dist & Home	83.2	76.2	15.9	10.3	10	26.8	26.8	26.8	26.8	26.8
Digital	69.7	33.8	43.5	36.4	34.1	43.5	43.5	43.5	43.5	43.5
Maintenance	58.0	63.5	64.0	64.4	65.8	69.8	72.3	75.0	77.6	80.3
PP&E	637.4	698.2	703.6	707.8	724.2	767.3	795.4	825.4	853.5	883.5
Depr & Amort	134.0	142.4	148.9	158.2	167.4	165.8	171.9	178.4	184.4	190.9
EBIT	141.1	155.8	319.9	331.5	302.8	315.0	333.5	354.2	374.7	395.5
% Margin	4.27%	4.74%	9.08%	9.18%	7.98%	7.63%	7.63%	7.63%	7.63%	7.63%
Taxes	59.1	70.7	108.6	122.8	83.0	81.1	85.9	91.2	96.5	101.8
Effective Tax Rate	41.89%	45.40%	33.94%	37.05%	27.42%	25.75%	25.75%	25.75%	25.75%	25.75%
After Tax Profits	82.0	85.1	211.3	208.7	219.8	233.9	247.6	263.0	278.2	293.7
Plus: Depr & Amort	134.0	142.4	148.9	158.2	167.4	165.8	171.9	178.4	184.4	190.9
Less: CapEx	-278.5	-245.0	-153.3	-161.5	-169.0	-198.4	-185.9	-190.5	-191.2	-195.8
Less: Change in Net WC		-139.1	-109.3	147.8	75.9	-47.2	-31.1	-34.8	-34.5	-35.1
Free Cash Flow		-170.15	-73.37	179.79	158.70	154.1	202.5	216.0	236.9	253.7

Cost of Debt	Zero Debt
Tax Rate	25.75%
Interest Payment	—
Risk-free Rate	2.36%
Mkt Risk Premium	4.20%
Beta	1.14
Cost of Equity	7.148%
PV of FCF 2018-22	855.1
Terminal Growth Rate	2.16%
PV of Terminal Value	3601.3
PV all Equity	4456.4
Forecast Price	25.32
Upside	15.63%

Discount Period	1	2	3	4	5
Discount Factor	0.93	0.87	0.81	0.76	0.71
PV of Cash Flow	143.9	176.4	175.6	179.7	179.6
Discount rate	7.148%				
Terminal Value	5086.0				
TV Disc Factor	0.71				
PV of TV	3601.3				
Current Market Cap ($M)	3854				
Current Share Price	21.90				
No. Shares (M)	176.0				

Appendix

1. Company Q4 Earnings Call - https://seekingalpha.com/article/4154803-american-eagles-aeo-ceo-jay-schottenstein-q4-2017-results-earnings-call-transcript?page=1
    - Earnings call transcript references were taken from this link
2. GDP Growth Figure - https://tradingeconomics.com/united-states/gdp-growth
3. Tax Rates - PriceWaterhouseCooper – Building on Tax Reform (2018)
4. Market Risk Premium – Aswath Damodaran “Equity Risk Premiums – Looking Backwards and Forwards…”, 2012
5. Market Returns – Fama French Data Library http://mba.tuck.dartmouth.edu/pages/faculty/ken.french/data_library.html
6. AEO 10K – March 12th 2018
7. IMF inflation forecasts - http://www.imf.org/external/pubs/ft/weo/2018/01/weodata/index.aspx
8. FOMC inflation forecasts - https://www.federalreserve.gov/monetarypolicy/fomcprojtabl20171213.htm
9. eMarketer – Breakdown of channel revenue https://retail-index.emarketer.com/company/5374f24c4d4afd2bb44465b7/american-eagle-outfitters

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