# AEROPOSTALE

### **Rating: BUY**

Aeropostale Inc. (ARO) is currently undervalued. Our DCF scenario analysis arrives at a value of \$22.52 per share, compared to the current market value of \$12.87. This implies an upside of 75%.

Our **Comparables approach confirms the DCF valuation**, with ARO's multiples **trading at the low end of the industry**. In our industry report from September, we have established that the industry is currently fairly valued (no material changes have occurred since then).

After 13 consecutive years of top-line growth and increasing same store sales, in 2011, ARO experienced a sales decline by 2.4% and a merchandise margin drop of 8%. This resulted in an 11% decrease in operating margin, from 16.1% to 5.2%. The company's revenue has stabilized in 2012 but margins have yet to rebound.

The recent **performance slump** can be traced to 1) **fierce price competition** from **increased clearance sales**, which were caused by **inventory overhang in the industry**. This was triggered by a **slower than expected recovery**, 2) **increased input costs** due to a **spike in cotton prices**.

Going forward, ARO with its small stores, high inventory turns and low overhead costs will continue to have a better ability to serve its core products to customers at lower prices than its main competitors.

The H1 numbers have shown that the **bleeding has been stopped** and **ARO has stabilized**. As the industry works through the excess inventory, **price competition will decrease**.

Due to its low prices and low margins, ARO was hit harder by the spike in cotton prices than other firms in the industry. Consequently, ARO will see a **larger rebound against favourable comps in H2**.

The current valuation is cheap, even without considering any top-line recoveries.

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### Company Rating BUY

Target price \$22.52

Scenario	Price	Weight
Base	\$25.26	50%
Slow correction	\$17.16	25%
Bull	\$37.84	10%
Bear	\$12.12	15%





Source: PEC Research



Key Figures	
Share price (\$)	12.87
Price/Earnings(TTM)	17.14
Enterprise value(\$MM)	876
Equity value(\$MM)	1,030
Sales LTM(\$MM)	2,387
Gross Profit LTM(\$MM)	699
Source: Company reports, Capital IQ	

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# **Company Overview**

### About Aeropostale<sup>1</sup>

Aéropostale, Inc. is a mall-based, specialty retailer of **casual apparel and accessories**, principally targeting **14 to 17 year-old young women and men** through its Aéropostale stores, and **7 to 12 year-old kids through its P.S. from Aéropostale stores**.

The Company provides customers with a focused selection of high-quality, active-oriented, fashion and fashion basic merchandise at compelling values. Aéropostale maintains control over its proprietary brands by **designing**, **sourcing**, **marketing and selling all of its own merchandise**. Aéropostale products can only be purchased in its Aéropostale stores and online at www.aeropostale.com. P.S. from Aéropostale<sup>®</sup> products can be purchased in P.S. from Aéropostale stores and online at www.ps4u.com.

The Company currently operates over **980** Aéropostale stores across the United States, Puerto Rico, and Canada, over **70** P.S. from Aéropostale stores in the United States. In addition, pursuant to various licensing agreements, licensees operated 14 Aéropostale and P.S. from Aéropostale stores in Middle East and South East Asia

### **Key Executive Management**

Both Thomas Johnson and Mindy Meads were promoted to CEO position in February 2010, when the long-time Aeropostale veteran Julian Geiger resigned. Recently, Mindy Meads resigned, resulting in **Thomas Johnson becoming the sole CEO**. We believe that this change was the result of increased pressure from investors, who did not like the structure of CEOs. We also prefer the sole CEO structure, which we believe fosters better and less bureaucratic strategic decision-making. Mr Geiger remains chairman of the board, resulting in this position being separated from the CEO role, which we also view as a positive. The Management Team remains as follow:

- Julian R. Geiger, Chairman
- Thomas P. Johnson, Chief Executive Officer
- Michael J. Cunningham, President
- Marc Miller, Chief Financial Officer

The company modified its **incentive plan**, which now has awards that may include cash and equity-based compensation (stock options, restricted stock, performance-based awards, and stock appreciation rights based on a combination of metrics). We believe this is an **important factor in aligning the long-term financial interests of equity-eligible employees with the interests of stockholders**, particularly because inside ownership (1.3% of total shares) is relatively low right now.

<sup>&</sup>lt;sup>1</sup> According to Aeropostale Investor Relationship web page

### **Company positioning**

ARO is **positioned as the entry price point for branded apparel**, **for teenagers**. The company offers what they consider **branded core basics** (Figure 1) at **low price points** (Figure 2).

#### Figure 1: Core basic merchandise



Source: Company website; PEC Research

We estimate that **about 80% of the business comes from so-called core items** (ARO sells ~400MM units per year out of which 25% are graphic t-shirts<sup>2</sup>), with remainder coming from so-called "fashion" items, which are sold at higher price points with higher margins<sup>3</sup>. These core items include graphic t-shirts, camis, hoodies, polos and basic jeans. The focus on **cheap core items differentiates ARO from its main competitors** – Abercombie and Fitch, American Eagle, Urban Outiftters, Holister - as fashion makes up for a significantly larger share of these competitors' sales. After recent store visits, we estimate that the fashion content for these companies is between 35-60% of the merchandise available in the store.

The core customers are 14 to 17 year old teenagers (predominantly female), for whom ARO offers the opportunity to buy "trendy" branded apparel at reasonable prices. During interviews with customers in the target age group, we have realized that it is this **brand aspect at low prices**, which makes ARO so **attractive to its customers**. Moreover, when asking about substitue brands, the answers were ANF, AEO, Hollister, American Apparel and Urban Outfitters. This is similar to what management and analysts consider the 'true' competitors. When we asked about other "cheap" options, such as H&M and the GAP, the general response was that there is not brand associated with H&M and that the GAP is not a trendy brand.

<sup>&</sup>lt;sup>2</sup> 2010 Q4 Earnings Call

<sup>&</sup>lt;sup>3</sup> 2012 Q2 Earnings Call and store visits carried out in October 2012

			AÉROPOSTALE	HOLLISTER	AMERICAN EAGLE	Abercrombie & Fitch
	BASICS	Graphic tees	\$7.50	\$10.00	\$15.95	\$20.00
s	BASICS	Hoodies	\$12.00	\$20.00	\$29.50	\$40.60
GIRLS	BASICS	Skinny jeans	\$19.75	\$29.75	\$29.99	\$39.00
G	FASHION	Laced tee	\$14.00	\$29.50	\$29.95	\$48.00
	FASHION	Colored jeggings	\$24.75	\$34.65	\$29.99	\$39.00
	BASICS	Graphic tees	\$9.00	\$10.00	\$15.95	\$15.00
GUYS	BASICS	Hoodies	\$18.00	\$29.75	\$29.95	\$40.00
B	BASICS	Straight leg jeans	\$19.75	\$19.75	\$29.99	\$49.00
	FASHION	Colored jeans	n/a	\$24.75	n/a	\$39.00
Ave	rage price	point	\$15.59	\$23.13	\$26.41	\$36.62

#### Figure 2: Price comparison

*include current promotions but exclude clearance prices.* Source: Company websites; Jefferies

### **Sales analysis**

After 13 years of consecutive comp. sales growth, ARO experienced a very disappointing 2011, caused by fierce price competition. As we are about to show in more detail, ARO has experienced tremendous sales growth over the past 10 years. Sales have grown from \$301MM in 2001 to \$2,400MM in 2010 (Figure 3). It is also worth mentioning that this sales growth was accompanied by 13 consecutive years of increasing comparable sales<sup>4</sup>. However, in 2011, ARO's sales have dropped by 2.4% to \$2,342MM. This slowdown in top line growth was the result of fierce price competition, resulting from inventory overhang in the industry, which was caused by a slower recovery than most retailers initially expected.

Figure 3: ARO Sales (in \$MM), Projections reflect base case



ARO, sources clothes through third party suppliers, primarily from (Asia and Africa). It then sells the merchandise through its over 1000 stores and its online channel. Sales outside North America account for less than 5% of revenues and are mainly executed through the online channel. There are currently no plans to open "owned" stores outside North America.

ARO sells its merchandise through two main channels; 1) Stores and 2) Online

- 1) Store sales are driven by a) the total number of square feet and b) the sales per square feet.
  - a) The number of total square feet for ARO has grown with a CAGR of 15% from 962,714 sq. ft. in 2001 to 3,908,786 sq. ft. in 2011. This growth has been primarily driven by new store openings (Figure 4 and 5) and to a very small extent by an increase in the average sq. ft. per store. The total number of stores has increased with a CAGR of 14.3% from 278 stores in 2001 to 1,057 stores in 2011. Over the same time period, the average store size has grown from 3,463 sq. ft. to 3,698 sq. ft. (0.7% CAGR).

However, the store growth has slowed down significantly as the overall store base continued to increase (Figure 5). The growth rate decreased from over 30% in 2002, to 4.4% in 2012. If one only accounts for the Aeropostale Inc. stores (excluding the P.S. stores), the growth rate has

<sup>&</sup>lt;sup>4</sup> Stores that have been open for at least 14 months

actually been below 3% for the past two years (2.9% in 2010 and 2.2% in 2011).



#### Figure 4: Total number of stores, Projections reflect base case



#### When forecasting the store growth, one has to **differentiate between** the Aeropostale stores and the P.S. stores.

We believe that Aeropostale's North American store portfolio is approaching saturation, which is in line with management's comments<sup>5</sup> that Aeropostale stores can grow to between 1000 and 1100 stores in North America. As mentioned above, the growth for the ARO stores has been below 3% per annum for the last couple of years. Therefore, in our base case we are assuming that the store growth trend for ARO observed over the previous 10 years will continue, and North American store grow will taper-off towards zero.

On the other hand, we believe that there is room for a total of 200 P.S. stores in North America. We are forecasting the roll-out of P.S. stores based on the roll-out of similar formats (targeting children), such as abercrombie kids (Figure 6). Management has recently stated that there might be room for up to 500 P.S. stores, which is more optimistic than our forecasts and seems somewhat unrealistic when looking at the evidence from Abercrombie and 77kids. Nevertheless, we believe that management forecasts for P.S. store rollouts over the next 2 years are more reliable and we have therefore used them in our prediction. In line with management, we believe that ARO will have rolled out 100 P.S. stores by the end of this year. Our baseline forecast assumes a total rollout of approximately 180 P.S. stores in North America over the next 10 years.

<sup>&</sup>lt;sup>5</sup> 2010 Q4 Earnings Call



#### Figure 6: Abercrombie kids rollout





b) Sales per square foot have grown with a CAGR of 3.6% from \$456 in 2001 to \$626 in 2010. However, in 2011, sales per square foot have dropped by 9%, to \$561 (Figure 8).

Figure 8: ARO Sales per Sq. Ft., Projections reflect base case



Source: Company data; PEC Research

Inventory overhang in the industry has led to extensive clearance sales, putting pressure on ARO's core business. Sales per square foot are a function of **1**) **# of Transactions, 2**) Units per **Transaction and 3**) Average Unit Retail Price. As can be seen in the table below, the recent 9% drop in sales per square foot was primarily driven by a 10% drop in average unit retail price (Figure 9).

As mentioned, Aeropostale is **positioned as the entry price point for branded apparel for teenagers**. The company offers what they consider branded core basics (including graphic t-shirts, camis, hoodies, polos, etc.) at low prices. We estimate that about 80% of the business comes from these core items, with remainder coming from so called "fashion" items, which are sold at higher price points with higher margins<sup>6</sup>. Fashion traditionally makes up for a significantly higher share of the

<sup>&</sup>lt;sup>6</sup> 2012 Q2 Earnings Call and store visits carried out in October 2012

competitors sales (ANF, AEO and URBN), which allowed ARO to somewhat differentiate itself from its main competitors<sup>7</sup>. However, the slower than expected economic recovery (Figure 9 and 10) has left ARO's competitors with inventory overhang (Figure 11). These retailers are placing their orders about 12 months in advance. The strong GDP growth towards the end of 2009, combined with the historically observed trend of strong V-shaped recoveries led to overoptimistic orders for the end of 2010 and 2011 (Figure 10). These overoptimistic orders then turned into excess inventory (Figure 11).



This growth in excess inventory was particularly troublesome going into the holiday season 2011 (end of Q3 inventory), which accounts for over  $1/3^{rd}$  of the annual revenues. The inventory overhang, in turn, resulted in the competitors engaging in very aggressive clearance sales.



#### Figure 11: Y-o-Y growth in Inventory per square foot (in %)

#### Figure 12: Industry gross margin



The increased competition at lower prices left ARO with a decrease in its transactions (Figure 13), as customers were taking advantage of the competitor's clearance sales. Consequently, ARO was forced to also drastically increase its promotional activity. As transactions slowed

Source: Company Data; PEC Research

<sup>&</sup>lt;sup>7</sup> From our store visits, we believe that fashion content >50% for ANF, Hollister and URBN; >35% for AEO

down, ARO started to heavily promote 2 for 1 deals, which lead to a 7% increase in units per transaction (Figure 13). However, as a result of the price competition, ARO's average unit retail price declined by 10% (Figure 13).

#### Figure 13: ARO SSF composition over time

		<u>2004</u>	2005	2006	<u>2007</u>	2008	2009	<u>2010</u>	<u>2011</u>
	Comparable average unit retail change	-2%	-8%	3%	-3%	2%	3%	-4%	-10%
	Comparable units per transaction	6%	2%	-2%	2%	3%	4%	4%	7%
	Comparable transactions	5%	10%	1%	3%	4%	4%	2%	-6%
Total:	Change in SSF	9%	4%	2%	3%	8%	10%	2%	-9%

Source: Company data; PEC Research

Even before the recent 10% drop in average unit retail price, the increase in sales per square feet over the past 10 years was mainly driven by increases in units per transaction and overall transactions (Figure 14).



ARO's business model, as an entry price point for branded teen apparel will remain viable. While we believe that this increased price competition will remain in the short term, we are convinced that ARO's business model, as an opening price point in the branded apparel teenager segment, will remain viable. ARO is structurally positioned to serve basic branded apparel to teenage customers at low price points. The company operates relatively small (Figure 16) but very productive stores that achieve high inventory turnover (Figure 17) and result in unparalleled Sales per Sq. Ft. (Figure 19). This operational efficiency, combined with the lowest overhead cost in the industry (Figure 18) allows ARO to sell its core basics at lower prices than its competitors.



The competitors that have recently started to put pricing pressure on ARO in its core basic business have done so to churn through excess inventory (Figure 11). However, their business models are not set-up to compete with ARO on price in the long run. These retailers operate larger stores with higher rental and overhead costs (Figure 16 and 17), resulting in lower SSF (Figure 19). These business models need higher margin sales to stay viable, as restructuring the whole organization towards a business model that supports low margin sales with high turnover is not feasible in the short run.



Source: Company Data; PEC Research

Figure 19: Sales per Sq. Ft. (in \$)



Therefore, we believe that as the economy recovers and the likes of Hollister, Abercrombie & Fitch, American Eagle, etc. load off their excess inventory, ARO will be able to return to a slightly less aggressive pricing strategy. In turn, SSF will start to recover, which will positively affect the company's sales growth. As a matter of fact, we see evidence that the "bleeding" has stopped and that we are seeing first signs of a recovery. Comparable sales have actually increased by 2% during the first quarter of 2012 after 4 consecutive quarters of significant decreases in Comparbale sales (Figure 20). We see a similar picture with respect to Average Unit Retail Price ("AUR"); After 4

Figure 16: Average store size (in thousand Sq. Ft.)



consecutive quarters of significant decreases, AUR rose by 1% in Q1 2012 (Figure 20).

Figure 20: Comparable sales and Average Ur	nit Retail development over past 30 months
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	<u>2010 Q1</u>	<u>2010 Q2</u>	<u>2010 Q3</u>	<u>2010 Q4</u>	<u>2011 Q1</u>	<u>2011 Q2</u>	<u>2011 Q3</u>	<u>2011 Q4</u>	<u>Q1 2012</u>	<u>Q2 2012</u>
Comp. sales	8%	4%	0%	9%	-5%	-14%	-9%	-9%	2%	0%
AUR	-1%	-1%	-6%	2%	-11%	-16%	-7%	-6%	1%	-1%

Source: Company data; PEC Research

2) Online sales have grown from \$21MM in 2006 to \$182MM in 2011 (Figure 21). This is the result of the adoption of the online channel by domestic customers and also of on-going globalization. Currently, online sales are the primary source for international customers to acquire ARO merchandise (ARO ships to over 65 countries). However, as online sales have grown in an absolute dollar amount, and as their share of total sales has increased, the growth rate has tapered off substantially from over 100% 2007 to about 14% in 2011 (Figure 22).

Unlike most of its competitors, Aeropostale has outsourced its online channel to a third party. A third party provides fulfillment services for the ecommerce business, including warehousing the inventory and fulfilling the customers' orders.

We forecast online sales continuing to grow significantly faster than store sales, mainly driven by international customers. However, we also believe that the growth rate for online sales will continue its decline. This is the result of increasing maturity described above. The online channel has been available in the apparel industry for almost 15 years now. Hence, one would expect that a certain level of maturity with respect to adaption, at least domestically, has been achieved.



#### Figure 21: Online Sales (\$MM), Projections reflect base case





Source: Company Data; PEC Research

### **Margin analysis**

#### **Gross Margin**

Over the past 10 years, the gross margin has fluctuated around 35% (Figure 23). The gross margin is currently at an historical low of around 29%, significantly below its high of 40% from 2009. This is the result of 1) the increased price competition, which we alluded to earlier in this report and 2) of an unusual spike in cotton prices during 2011.





Source: Company data; PEC Research

ARO's gross margin is primarily driven by the company's merchandise margin (Figure 25). ARO's merchandise margin, in turn, is determined by the SSF/ Average Unit Retail Price and the input costs, which are primarily cotton.

We see two main drivers that affect the gross margin; 1) Sales per Sq. Ft. and 2) **Cotton prices** 

1) As shown above, ARO has experienced a 9% drop in SSF in 2011, which was caused by intensive price competition in ARO's core basics merchandise. The price competition lead to a 10% drop in ARO's Average Unit Retail Price in 2011 (Figure 11).





As we have already stated, we believe that the extensive price competition that has caused the drop in ARO's AUR (which consequently caused the drop in SSF) is not sustainable in the long run. The competitors that have put pressure on ARO's core business (ANF, AEO and URBN) operate larger stores with higher overhead cost and lower inventory turns than does ARO. Therefore, these competitors are not set-up to compete on low prices in the long run. However, there is still a lot of inventory overhang in the channel, resulting in continued pricing competition for the 2<sup>nd</sup> half of the fiscal year. We forecast that the competition will start to decrease after this year's holiday season, leading to a slow recovery in AUR and SSF for ARO. As we have also shown earlier in this report, there have been first signs of a decrease in price competition during the first 2 quarters in 2012.

2) While ARO sources all of its clothes from suppliers (predominantly from Asia and Central America), the company is vulnerable to changes in cotton prices. Cotton prices have experienced a spike in 2011 (Figure 26), which was caused by an outlier event driven by short term supply shortage (Flooding in Pakistan, historically poor crop in China, bad Monsoon in India). While the price spike occurred during the first half of 2011, it did not hit the merchandise margin until Q3 2011 (Figure 27), due to the structure of the purchasing contracts.

Cotton prices have recovered and we forecast that they will follow their long run trend. The way ARO purchase agreements are set up, the company will see the impact of lower cotton prices beginning in Q3 and even more so in Q4.



Figure 26: Cotton prices (US Cents per Pound)

Source: USDA

	<u>2010 Q1</u>	<u>2010 Q2</u>	<u>2010 Q3</u>	<u>2010 Q4</u>	<u>2011 Q1</u>	<u>2011 Q2</u>	<u>2011 Q3</u>	<u>2011 Q4</u>	<u>Q1 2012</u>	<u>Q2 2012</u>
Merchandise margin	2.70%	0.90%	-1.70%	2.70%	-7.40%	-9.40%	-8%	-8.30%	-1.60%	0.40%
Comp. sales	8%	4%	0%	9%	-5%	-14%	-9%	-9%	2%	0%
AUR	-1%	-1%	-6%	2%	-11%	-16%	-7%	-6%	1%	-1%

It is important to notice that the increase in cotton prices has hurt ARO more than its competitors due to its position as the entry price brand in the branded apparel industry. As a result of the low prices ARO offers to its customers, it operates on slimmer merchandise margins than its competitors (input costs are quite similar). As a simple example, if ARO sells t-shirts at \$15, that cost the company \$10, a 10% increase in cost due to higher cotton prices decreases the company's merchandise margin by 20%. If ANF sells a t-shirt for \$20 that cost it \$12, a 10% increase in cost due to higher cotton prices decreases the company's merchandise margin by 15%. Therefore, just as ARO's merchandise margin took a more severe hit as a result from the increase in cotton prices, the company's merchandise margin will also recover more significantly, now that the cotton prices are getting back towards historical levels.

ARO's management has confirmed that two thirds of the merchandise margin drop of 830 bps was driven by an increase in the price of cotton. Moreover, management confirmed that the 830 bps drop in the merchandise margin was the dominant driver of the 10% gross margin decline.

Therefore, we expect a recovery of 3-5% in gross margin in the second half of 2012 based on the sole fact that have cotton prices have reverted to "normal levels". The drop in gross margin that is not explained for by an increase in cotton price is attributable to the sharp drop in SSF, caused by a) a bad selection in merchandise on the fashion front and b) increased price competition in ARO's important core fashion business. As we have stated earlier in this report, we believe that the fierce price competition won't continue indefinitely and we have in fact seen first signs of a recovery. Nevertheless, the company is facing another tough holiday season as inventory levels in the industry are still high. The price competition will remain until competitors will have unloaded their excess inventory and the economic environment will improve. In the long run, ARO is better positioned than the competition to serve as the entry price point retailer for the teenage segment, due to a business model with small stores and high turnover per square foot.

### **Operating margin**

The main drivers for the operating margin are COGS and SG&A expenses. As discussed above, the gross margin has been quite volatile (between 29% and 40% of sales), driven by fluctuations in sales per sq. ft. and cotton prices. When looking at SG&A, we can see that the SG&A expenses as a percentage of sales

have remained very stable in a range between 19 and 21% of sales over the past 12 years.

Consequently, **COGS have been the main driver for operating margin fluctuations** (Figure 28 and 29).



As mentioned earlier in this report, contrary to most other companies in the industry, ARO has outsourced its online channel to a third party. As a result, management has indicated that the margin contribution for ARO's EBIT margin contribution for the online channel does not differ significantly from the EBIT margin contribution of its competitors.

In line with our forecast of a gross margin recovery in the long run, it follows that operating margin will improve in a similar fashion, as it is driven by the gross margin (Figure 29).

# Working Capital/ CAPEX

Working capital as a % of sales has fluctuated between 1.9% and 2.6% over the past 5 years (Figure 30). Lower days inventory held were offset by lower days payable outstanding (Figure30). We forecast working capital to remain around 2.3% of sales going forward.



Apart from the maintenance CAPEX, which we estimate to be around \$40MM per year at the current store count, there are two main drivers for CAPEX at ARO; **1) New store openings** and **2) Store remodelling** (Figure 31).

The cost per net CAPEX per new store opening is close to \$0.6MM depending on the location of the store. The store remodelling programs can almost be treated as maintenance CAPEX, as the remodelling has been an on-going effort and we expect this to continue. Consequently, we believe CAPEX to be in the region of \$80-95MM per year over the next 5 years.

### Fashion risk – GAP case study

When analysing a specialty retailer, one has to be aware that there is always a considerably amount of fashion risk that can adversely affect the investment. GAP is an interesting case study, as the company dominated the US retail market not too long ago but has faced severe headwinds for over 20 years now.

Over the past two decades, the wide proliferation of retail concepts has segmented the market into niche players. Part of Gap's initial dominance can be attributed to the fact that consumers simply had fewer options when GAP first emerged.

#### Figure 32: Emergence of New Retailers



Source: Credit Suisse, PEC Research

The rise of highly specialized softline retailers, focusing on the various sub segments of the market (kid's, teen, women's, etc.) adversely affected Gap's popularity and market share. Gap endured the opening of 10,000-plus specialty

softline stores over the past 10-15 years, a period during which Gap's U.S. store base stopped growing and SSF fell 35%.





Source: Credit Suisse, Company data

The GAP case study shows us that focus in terms of market segment on the one hand and focus on basic products on the other hand can help to mitigate fashion risk. ARO's focus on both, a specific market segment (teen's market) and somehow basic product assortments (jeans, t-shirts, hoodies, etc.) mitigates part of the fashion risk inherent to the branded apparel industry. Moreover, unlike the GAP over 40 years ago, ARO has emerged during a time of fierce competition and a very wide assortment of different specialty retailers.

### Valuation

We believe that ARO's equity is currently undervalued. The stock has dropped from over \$20 per share to \$13 per share after the Q2 Earnings guidance was released (Figure 34). While the deterioration in key performance indicators has been stopped, the market was disappointed by the fact that ARO has yet to see a recovery in margins.



In our opinion the market is too focused on the current pricing pressures and neglects the fact that ARO's business model is structurally different from the likes of ANF, AEO and URBN. In order to arrive at this conclusion, we used a two pronged approach based on 1) DCF forecast and 2) Comparables analysis

### **DCF** Valuation

Given the current level of high uncertainty in the industry, we have valued ARO using several different scenarios (Figure 35). We have assigned probabilities to each scenario based on our estimated likelihood of each outcome. As should be clear from our analysis thus far, we believe that the current environment of fierce price competition in ARO's core basic segment is only of temporary nature. We do not believe that the competitors' business model allow them to compete on price with ARO in the long run. Once the current inventory overhang is worked through, price competition will start to decrease. We have showed evidence that the trough has already been passed and the "bleeding" in terms of further AUR and comp sales decreases has been stopped (Figure 18).

Moreover, regardless of the price competition, ARO will start seeing its merchandise margins increase beginning in Q3 2012, as a result of lower input prices. Management has stated there is a 2 to 3 quarter lag with respect to passing through higher input prices from its suppliers. This is due to the nature of the buying contracts. In 2011, Q3 was the first quarter that was really hit by the increased cotton prices. Hence, ARO is now up against some favourable comps.

#### Figure 34: Share price

From the valuation is that follows below, it becomes apparent that the market has priced ARO according to our worst case scenario, which we consider an unlikely outcome for reasons stated above. Using a weighted average, given what we consider the likelihood of the different outcomes, we get to a target share price of \$22.52.

Scenario	Price competition	New "normalized margin"	P.S.	Mainline roll out	Target share price	Probability assumed
Base	Fierce up to Q3 2013	Lower than peak in 2009, higher than depressed margin from 2011	200 stores by 2020	1060 stores in 2020	\$25.26	50%
Optimistic	Fierce up to Q1 2012	Will reverse towards peak margins	350 stores by 2020	1200 stores in 2020 (starting international expansion)	\$37.84	10%
Slow correction	Fierce for another 2 years	Slightly lower than base scenario	125 stores by 2020	1000 stores in 2020	\$17.16	25%
Structural- shift	Competitors will continue fierce competition with ARO on price indefinitely	Lower than in the past but slightly higher than in 2011, due to input price effects	Fails	965 stores in 2020	\$12.12	15%

#### Figure 35: Valuation Scenarios

### Base

SSF, driven by AUR and # of transactions will stay at their current depressed levels throughout the holiday season and the spring season. The price competition will start to lessen during next years back to school sales, at which point SSF will slowly start to recover. Gross margin will see a lift starting in Q3 due to favourably comps coming up with respect to merchandise margins, driven by the reversion in cotton prices. Long-term, margins will recover to levels seen between 2003 and 2007. Peak margins seen in 2009 and 2010 won't be sustainable. The roll-out of P.S. will follow past roll outs of similar formats (i.e. abercombie).

### **Optimistic**

SSF will stay at their current depressed level throughout this upcoming holiday season upon which the price competition will decrease. Consequently, there will be a solid recovery towards historical SSF levels. Gross margin will see a lift starting in Q3 due to favourably comps coming up with respect to merchandise margins, driven by the reversion in cotton prices. Long term margins will

recover to the levels seen in 2009 and 2010. The roll out of P.S. will be closer to managements' expectations than to the roll out of similar formats in the past.

### Slow correction

After a brief decrease in pressure on SSF during H1 2012, SSF will further decrease during the holiday season. Entering 2013, we will see a period of approximately two years of continued fierce pricing competition. Gross margin will see a lift starting in Q3 due to favourably comps coming up with respect to merchandise margins, driven by the reversion in cotton prices. Long term margins will not recover all the way to what we consider normalized pre-crisis margins (base case). The roll out of P.S. will be somewhat disappointing.

### Structural-shift

ARO's competition will make changes to their business models, allowing them to compete with ARO on price in ARO's core basics over time. Moreover, teenagers are putting less emphasis on wearing branded clothes. In this case, SSF will see further pressure, which will not go away as competitors work through inventory overhang and the economy continues to recover. Gross margin will see a lift starting in Q3 due to favourably comps coming up with respect to merchandise margins, driven by the reversion in cotton prices. Long term margins will stay at their current depressed levels, except for a slight lift due to more favourable cotton prices. The roll out of P.S. will fail.

### **Valuation Inputs**

- WACC vs. APV ARO is completely equity financed and we assume that the firm won't change its capital structure in the near future. ARO's management recently stated that there are no intentions of taking on debt. Therefore, it WACC and APV will yield the same results.
- Estimating beta Our approach to estimating the equity beta was to regress the monthly excess returns of seven companies in the industry (GPS, URBN, AEO, GES, ANF, ANN, ARO) over a 60 month period (Data from CRSP) on the excess returns of the market for the same period (Data from Fama French). We then unlevered the individual equity betas to derive the industry asset beta of 1.29, which we applied to ARO.
- Calculating the WACC As ARO does not use leverage, we are using our asset beta of 1.29 to calculate the required equity using the Capital Asset Pricing Model: RE=RF+βE(Rm-Rf). This resulted in a cost of equity of 9.47%. We used the 10-year treasury yield of 1.59%, as our risk free rate. While we are aware that in "normal times" this rate might be overstated, as it includes an implicit risk premium over buying one year bonds over a period of 10 years, we believe that we do not need to make an adjustment given the current interest rate environment. An historic market risk premium of 6.1% was used (Figure 37).

The cost of equity is also ARO's cost of capital, as the company is entirely equity financed.

#### Figure 36: Beta Calculation

	beta Calculation													
		Market	Market											
	Levered	Value of	Value of		Debt/	Marginal	Unlevere							
Company	beta	Debt	Equity	EV	Equity	Tax Rate	d beta							
GPS	1.184	1,614.0	17,060.0	18,674.0	9.5%	35%	1.08							
URBN	0.969	0.0	5,230.0	5,230.0	0.0%	35%	0.97							
AEO	0.963	0.0	4,170.0	4,170.0	0.0%	35%	0.96							
GES	1.656	10.4	2,090.0	2,100.4	0.5%	35%	1.65							
ANF	1.602	290.3	2,590.0	2,880.3	11.2%	35%	1.44							
ANN	1.784	0.0	1,620.0	1,620.0	0.0%	35%	1.78							
ARO	1.176	0.0	1,030.0	1,030.0	0.0%	35%	1.18							
Industry asset beta	1.29													

Industry asset beta

#### Figure 37: WACC Calculation WACC Calculation Target Capital Structure Debt-to-Total-Capitalization<sup>(1)</sup> - % Equity-to-Total-Capitalization(2) 100.0% Cost of Debt Cost of Equity Cost of debt(3) - % Risk-free Rate 1.59% Tax rate<sup>(4)</sup> 38.8% Market Risk Premium 6.1% After-tax Cost of Debt Levered Beta - % 1.29 Cost of Equity WACC 1) 2011 ratio - annual reports 2) 2011 ratio - annual reports 3) Total Interest Payments in 2011 (\$111m) divided by total Debt Outstanding in 2011 (\$2.047bn)

Source: Company Data; CRSP, PEC Research

### 4) http://www.taxrates.cc/html/us-tax-rates.html 5) yield on 10 year treasury, Source: US Treasury Department 6) Ashwath Damodaran - http://pages.stern.nyu.edu/~adamodar/ Source: Company Data; CRSP, PEC Research

#### **Base case outputs**

The outputs shown below are based on the base case scenario. Please refer to the appendix for detailed calculations of the remaining 3 scenarios (Optimistic, Slow correction and Structural shift).

	<u>2010 Q1</u>	<u>2010 Q2</u>	<u>2010 Q3</u>	<u>2010 Q4</u>	<u>2011 Q1</u>	<u>2011 Q2</u>	<u>2011 Q3</u>	<u>2011 Q4</u>	<u>Q1 2012</u>	<u>Q2 2012</u>	<u>Q3 2012 E</u>	<u>Q4 2012 E</u>	<u>Q1 2013 E</u>	<u>Q2 2013 E</u>	Q3 2013 E
Comp. sales	8%	4%	0%	9%	-5%	-14%	-9%	-9%	2%	0%	0%	0%	0%	2%	4%
AUR	-1%	-1%	-6%	2%	-11%	-16%	-7%	-6%	1%	-1%	0%	0%	0%	1%	2%
Change in Merchandise margin	2.7%	0.9%	-1.7%	2.7%	-7.4%	-9.4%	-8.0%	-8.3%	-1.6%	0.4%	4%	5%	5%	2%	3%

						Projectio	ons				
	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Avg. sq. ft. per store (ARO)	3700	3716	3735	3754	3773	3791	3810	3829	3849	3868	3887
Avg. sq. ft. per store (P.S.)	3000	3015	3030	3045	3060	3076	3091	3107	3122	3138	3153
Sales per squft.	561	562	568	576	588	599	611	624	636	649	662
Exisiting stores											
Aeropostale	965	986	988	1001	1011	1019	1027	1035	1040	1046	1051
P.S	47	71	100	125	150	170	180	190	195	200	205
Contribution	2101	2180	2267	2384	2511	2629	2733	2841	2934	3031	3131
Net New stores											
Aeropostale	21	2	14	13	10	8	8	8	5	5	5
P.S	24	29	25	25	25	20	10	10	5	5	5
Contribution	60	34	46	46	43	35	24	25	14	15	15
Total store count end of year	1057	1088	1127	1164	1196	1217	1225	1244	1246	1256	1266
y-o-y growth		2.9%	3.6%	3.3%	2.8%	1.8%	0.7%	1.5%	0.2%	0.8%	0.8%
Total store sales	2160	2214	2313	2430	2554	2664	2757	2866	2949	3046	3147
y-o-y growth		-3.3%	4.5%	5.1%	5.1%	4.3%	3.5%	3.9%	2.9%	3.3%	3.3%
Online	182	204	224	242	257	267	275	283	292	300	309
y-o-y growth		12.0%	10.0%	8.0%	6.0%	4.0%	3.0%	3.0%	3.0%	3.0%	3.0%
Total sales	2342	2418	2537	2672	2810	2931	3032	3149	3241	3347	3456
y-o-y growth		3.2%	4.9%	5.3%	5.2%	4.3%	3.4%	3.8%	2.9%	3.3%	3.3%

1030

81.27

		Hist	orical Peri	od								Projectio	n Period				
	2007	2008	<u>2009</u>	<u>2010</u>	<u>2011</u>	<u>LTM</u>	CAGR	<u>2012</u>	<u>2013</u>	<u>2014</u>	<u>2015</u>	2016	<u>2017</u>	<u>2018</u>	2019	2020	<u>2021</u>
Total sales	1590.883	1885.531	2230.105	2400.434	2342.26	2387.437	10.15%	2418	2537	2672	2810	2931	3032	3149	3241	3347	3456
y-o-y growth	n/a	18.5%	18.3%	7.6%	-2.4%	1.9%		3.2%	4.9%	5.3%	5.2%	4.3%	3.4%	3.8%	2.9%	3.3%	3.3%
COGS	1000.92	1185.58	1327.31	1455.55	1661.47	1688.224	13.51%	1692.31	1763.229	1830.247	1897.057	1934.694	2001.23	2078.154	2138.793	2208.782	2280.987
GM	37.1%	37.1%	40.5%	39.4%	29.1%	29.3%		30.0%	30.5%	31.5%	32.5%	34.0%	34.0%	34.0%	34.0%	34.0%	34.0%
SG&A	345.81	405.88	464.16	499.37	494.83	521.596	9.37%	527.0338	545.4593	574.4571	604.2477	630.2411	651.916	676.9744	696.728	719.5275	743.0487
EBITDA	244.15	294.07	438.64	445.51	185.96	177.62	-6.58%	198.24	228.33	267.19	309.15	366.42	379.02	393.59	405.07	418.33	432.01
% margin	15.3%	15.6%	19.7%	18.6%	7.9%	7.4%		8.2%	9.0%	10.0%	11.0%	12.5%	12.5%	12.5%	12.5%	12.5%	12.5%
D&A	36.76	45.77	49.85	58.02	65.11	63.744	15.37%		61.75267	65.03557	68.40824	71.351	73.80487		78.87813		84.1222
EBIT	207.40	248.30	388.79	387.49	120.85	113.87	-12.63%	139.40	166.58	202.15	240.74	295.07	305.22	316.95	326.20	336.87	347.88
% margin	13.0%	13.2%	17.4%	16.1%	5.2%	4.8%		5.8%	6.6%	7.6%	8.6%	10.1%	10.1%	10.1%	10.1%	10.1%	10.1%
Taxes	79.81	99.39	153.35	155.34	43.58	36.374		54.11397	64.66633	78.47646	93.4564	114.546	118.4854	123.0398	126.63	130.7738	135.0488
EBIAT	127.59	148.91	235.44	232.16	77.27	77.50	-11.78%	85.28	101.91	123.68	147.29	180.52	186.73	193.91	199.57	206.10	212.83
Plus: Depreciation & Amortization	36.76	45.77	49.85	58.02	65.11	63.74		58.85	61.75	65.04	68.41	71.35	73.80	76.64	78.88	81.46	84.12
Less: Capital Expenditures (net)	-82.306	-83.035	-53.883	-100.807	-73.323	-65.863		-91.8683	-96.4068	-90.8444	-89.9345	-90.872	-90.965	-94.4615	-97.2179	-100.399	-103.681
Less: Increase in Net Working Capital	n/a	14.54	-48.71	46.71	36.97	-14.22		-16.05	0.58	0.81	0.86	0.99	0.41	0.48	0.38	0.44	0.45
Unlevered Free Cash Flow		97.109	280.117	142.660	32.092			68.311	66.675	97.057	124.902	160.013	169.156	175.609	180.848	186.720	192.825
WACC	9.47%				Discount P			0.5	1.5	2.5	3.5	4.5	5.5	6.5	7.5	8.5	9.5
PV of FCF from '13 to '20	776.99				Discount Fa			0.96 65.29	0.87 58.21	0.80 77.41	0.73 90.99	0.67 106.49	0.61 102.83	0.56 97.52	0.51 91.74	0.46 86.52	0.42 81.62
Terminal Growth	2.00%																
PV of Terminal Value	1195.802																
Enterprise Value	1972.79																
Less: Net Debt	80.34																
Equity Value	2053.13																

#### **Comparables Analysis**

As a sanity check to our DCF valuation, we created a Comparables table to asses ARO's valuation relative to other companies in the industry (Figure 38). Looking at the table, one can clearly see that **ARO is valued below the industry median on all ratios** that we have examined, except for Price to Book. In our previous industry report from September 16, we have established that the **industry as a whole is currently fairly valued**. Since then, we have not observed any material events that would change our opinion regarding the industry. Hence, the fact that **ARO's valuation below industry averages confirms our DCF valuation, which also concluded that ARO is currently undervalued**.

**Current Market Cap** 

Shares outstanding

Per share

#### Figure 38: Comparables table

Company	P/E (NTM)	P/E (2011)	P/E (T12M)	EV/EBITDA (T12M)	EV/Sales (2012E)	EV/Sales (T12M)	P/S (2012E)	P/S (T12M)	P/B	EV (\$MM)	Mkt Cap (\$MM)
ABERCROMBIE & FITCH CO	12.12	30.31	16.49	6.62	0.55	0.56	0.58	0.63	1.79	2,410	2,600
AMERICAN EAGLE OUTFITTERS	13.73	13.44	18.58	7.2	0.93	0.95	1.11	1.15	2.78	3,170	3,870
ANN INC	13.79	19.72	17.85	5.9	0.61	0.64	0.63	0.71	3.52	1,470	1,570
GAP INC/THE	14.27	10.27	19.14	7.81	1.02	1.06	1.04	1.12	4.94	15,890	6,390
URBAN OUTFITTERS INC	20.46	18.19	29.13	11.96	1.73	1.84	1.76	1.99	3.77	4,770	5,130
GUESS? INC	10.24	11.87	8.99	4.11	0.65	0.64	0.73	0.78	2.5	1,700	1,950
Median	13.76	15.82	18.22	6.91	0.79	0.80	0.89	0.95	3.15		
High	20.46	30.31	29.13				1.76		4.94		
Low	10.24	10.27	8.99	4.11	0.55	0.56	0.58	0.63	1.79		
AEROPOSTALE INC	12.27	7.14	14.59	5.33	0.35	0.36	0.42	0.43	<b>3.92</b>		

Source: Bloomberg; PEC Research

# Appendix

### Base case valuation

			S	ales Mc	del						
						Projectio	ons				
	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Avg. sq. ft. per store (ARO)	3700	3716	3735	3754	3773	3791	3810	3829	3849	3868	3887
Avg. sq. ft. per store (P.S.)	3000	3015	3030	3045	3060	3076	3091	3107	3122	3138	3153
Sales per squft.	561	562	568	576	588	599	611	624	636	649	662
Exisiting stores											
Aeropostale	965	986	988	1001	1011	1019	1027	1035	1040	1046	1051
P.S	47	71	100	125	150	170	180	190	195	200	205
Contribution	2101	2180	2267	2384	2511	2629	2733	2841	2934	3031	3131
Net New stores											
Aeropostale	21	2	14	13	10	8	8	8	5	5	5
P.S	24	29	25	25	25	20	10	10	5	5	5 15
Contribution	60	34	46	46	43	35	24	25	14	15	15
Total store count end of year	1057	1088	1127	1164	1196	1217	1225	1244	1246	1256	1266
y-o-y growth		2.9%	3.6%	3.3%	2.8%	1.8%	0.7%	1.5%	0.2%	0.8%	0.8%
Total store sales	2160	2214	2313	2430	2554	2664	2757	2866	2949	3046	3147
y-o-y growth		-3.3%	4.5%	5.1%	5.1%	4.3%	3.5%	3.9%	2.9%	3.3%	3.3%
Online	182	204	224	242	257	267	275	283	292	300	309
y-o-y growth		12.0%	10.0%	8.0%	6.0%	4.0%	3.0%	3.0%	3.0%	3.0%	3.0%
Total sales	2342	2418	2537	2672	2810	2931	3032	3149	3241	3347	3456
y-o-y growth		3.2%	4.9%	5.3%	5.2%	4.3%	3.4%	3.8%	2.9%	3.3%	3.3%

#### Balance Sheet

		Hist	orical Perio	bd							Projectio	n Period				
	2007	2008	<u>2009</u>	<u>2010</u>	<u>2011</u>	LTM	<u>2012</u>	<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>2016</u>	2017	<u>2018</u>	<u>2019</u>	<u>2020</u>	<u>2021</u>
Sales	1590.88	1885.53	2230.11	2400.43	2342.26	2387.437	2417.586	2537.02	2671.893	2810.455	2931.354	3032.167	3148.718	3240.595	3346.64	3456.04
Cost of Goods Sold	1000.92	1185.58	1327.31	1455.55	1661.47	1688.224	1692.31	1763.229	1830.247	1897.057	1934.694	2001.23	2078.154	2138.793	2208.782	2280.987
Current Assets																
Inventories	136.49	126.36	132.92	156.60	163.52	246.708	171.5493	178.7383	185.5319	192.3044	196.1196	202.8645	210.6622	216.8091	223.904	231.2233
Prepaid Expenses and Other	13.60	17.38	21.05	24.53	35.22	16.066	25.36886	26.62213	28.03742	29.49141	30.76006	31.81794	33.04097	34.00507	35.11785	36.26584
Other current Assets	22.67	21.61	29.08	22.88	19.34	49.855	27.3369	28.6874	30.21248	31.77926	33.14633	34.28628	35.60418	36.64308	37.84219	39.07923
Total Current Assets	172.76	165.35	183.04	204.01	218.09	312.63	224.26	234.05	243.78	253.58	260.03	268.97	279.31	287.46	296.86	306.57
Current Liabilities																
Accounts Payable	99.37	77.25	90.85	103.01	103.48	141.031	106.6387	111.1076	115.3306	119.5406	121.9122	126.1049	130.9522	134.7732	139.1835	143.7334
Accrued Payroll	23.08	30.04	32.68	23.84	14.11	71.151	24.17586	25.3702	26.71893	28.10455	29.31354	30.32167	31.48718	32.40595	33.4664	34.5604
Other Current Liabilities	74.94	68.15	118.31	89.25	75.63	89.788	84.61551	88.16145	91.51235	94.85284	96.73468	100.0615	103.9077	106.9396	110.4391	114.0493
Total Current Liabilities	197.39	175.44	241.84	216.10	193.21	301.97	215.43	224.64	233.56	242.50	247.96	256.49	266.35	274.12	283.09	292.34
Net Working Capital	-24.63	-10.09	-58.80	-12.09	24.88	10.66	8.82	9.41	10.22	11.08	12.07	12.48	12.96	13.34	13.77	14.23

		Historical Period							Projection Period								
	2007	2008	2009	<u>2010</u>	<u>2011</u>	<u>LTM</u>	CAGR	<u>2012</u>	2013	<u>2014</u>	2015	2016	<u>2017</u>	<u>2018</u>	2019	2020	<u>2021</u>
Total sales	1590.883	1885.531	2230.105	2400.434	2342.26	2387.437	10.15%	2418	2537	2672	2810	2931	3032	3149	3241	3347	3456
y-o-y growth	n/a	18.5%	18.3%	7.6%	-2.4%	1.9%		3.2%	4.9%	5.3%	5.2%	4.3%	3.4%	3.8%	2.9%	3.3%	3.3%
COGS	1000.92	1185.58	1327.31	1455.55	1661.47	1688.224	13.51%	1692.31	1763.229	1830.247	1897.057	1934.694	2001.23	2078.154	2138.793	2208.782	2280.987
GM	37.1%	37.1%	40.5%	39.4%	29.1%	29.3%		30.0%	30.5%	31.5%	32.5%	34.0%	34.0%	34.0%	34.0%	34.0%	34.0%
SG&A	345.81	405.88	464.16	499.37	494.83	521.596	9.37%	527.0338	545.4593	574.4571	604.2477	630.2411	651.916	676.9744	696.728	719.5275	743.0487
EBITDA	244.15	294.07	438.64	445.51	185.96	177.62	-6.58%	198.24	228.33	267.19	309.15	366.42	379.02	393.59	405.07	418.33	432.01
% margin	15.3%	15.6%	19.7%	18.6%	7.9%	7.4%		8.2%	9.0%	10.0%	11.0%	12.5%	12.5%	12.5%	12.5%	12.5%	12.5%
D&A	36.76	45.77	49.85	58.02	65.11	63.744	15.37%	58.84557	61.75267	65.03557	68.40824	71.351	73.80487	76.64179	78.87813	81.45933	84.1222
EBIT	207.40	248.30	388.79	387.49	120.85	113.87	-12.63%	139.40	166.58	202.15	240.74	295.07	305.22	316.95	326.20	336.87	347.88
% margin	13.0%	13.2%	17.4%	16.1%	5.2%	4.8%		5.8%	6.6%	7.6%	8.6%	10.1%	10.1%	10.1%	10.1%	10.1%	10.1%
Taxes	79.81	99.39	153.35	155.34	43.58	36.374		54.11397	64.66633	78.47646	93.4564	114.546	118.4854	123.0398	126.63	130.7738	135.0488
EBIAT	127.59	148.91	235.44	232.16	77.27	77.50	-11.78%	85.28	101.91	123.68	147.29	180.52	186.73	193.91	199.57	206.10	212.83
Plus: Depreciation & Amortization	36.76	45.77	49.85	58.02	65.11	63.74		58.85	61.75	65.04	68.41	71.35	73.80	76.64	78.88	81.46	84.12
Less: Capital Expenditures (net)	-82.306	-83.035	-53.883	-100.807	-73.323	-65.863		-91.8683	-96.4068	-90.8444	-89.9345	-90.872	-90.965	-94.4615	-97.2179	-100.399	-103.681
Less: Increase in Net Working Capital	n/a	14.54	-48.71	46.71	36.97	-14.22		-16.05	0.58	0.81	0.86	0.99	0.41	0.48	0.38	0.44	0.45
Unlevered Free Cash Flow		97.109	280.117	142.660	32.092			68.311	66.675	97.057	124.902	160.013	169.156	175.609	180.848	186.720	192.825
WACC	9.47%				Discount P	eriod		0.5	1.5	2.5	3.5	4.5	5.5	6.5	7.5	8.5	9.5
					Discount Fa	actor		0.96	0.87	0.80	0.73	0.67	0.61	0.56	0.51	0.46	0.42
PV of FCF from '13 to '20	776.99				PV of Cash	flow		65.29	58.21	77.41	90.99	106.49	102.83	97.52	91.74	86.52	81.62
Terminal Growth	2.00%																

PV of Terminal Value	1195.802
Enterprise Value	1972.79
Less: Net Debt	80.34
Equity Value	2053.13
Current Market Cap	1030
Shares outstanding	81.27
Per share	25.26

6.5

0.56

149.01

5.5

0.61

150.26

7.5

0.51

141.34

8.5

0.46

133.60

9.5

0.42

126.56

## **Optimistic case valuation**

		Hist	torical Peri	od								Projectio	n Period				
	<u>2007</u>	<u>2008</u>	<u>2009</u>	<u>2010</u>	<u>2011</u>	<u>LTM</u>	CAGR	<u>2012</u>	<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>2016</u>	<u>2017</u>	<u>2018</u>	<u>2019</u>	<u>2020</u>	<u>2021</u>
Total sales	1590.883	1885.531	2230.105	2400.434	2342.26	2387.437	10.15%	2414	2541	2704	2884	3048	3210	3348	3473	3593	3727
y-o-y growth	n/a	18.5%	18.3%	7.6%	-2.4%	1.9%		3.0%	5.3%	6.4%	6.6%	5.7%	5.3%	4.3%	3.7%	3.5%	3.7%
COGS	1000.92	1185.58	1327.31	1455.55	1661.47	1688.224	13.51%	1665.416	1702.409	1784.911	1845.797	1935.766	2006.288	2075.709	2153.265	2227.8	2310.621
GM	37.1%	37.1%	40.5%	39.4%	29.1%	29.3%		31.0%	33.0%	34.0%	36.0%	36.5%	37.5%	38.0%	38.0%	38.0%	38.0%
SG&A	345.81	405.88	464.16	499.37	494.83	521.596	9.37%	518.9341	546.2954	581.4482	620.0723	655.417	690.1632	719.8023	746.6969	772.5434	801.2637
EBITDA	244.15	294.07	438.64	445.51	185.96	177.62	-6.58%	229.30	292.20	338.05	418.19	457.27	513.61	552.41	573.05	592.88	614.92
% margin	15.3%	15.6%	19.7%	18.6%	7.9%	7.4%		9.5%	11.5%	12.5%	14.5%	15.0%	16.0%	16.5%	16.5%	16.5%	16.5%
D&A	36.76	45.77	49.85	58.02	65.11	63.744	15.37%	58.74969	61.84733	65.82705	70.19978	74.20122	78.13492	81.49043	84.53523	87.46137	90.71285
EBIT	207.40	248.30	388.79	387.49	120.85	113.87	-12.63%	170.55	230.36	272.22	347.99	383.07	435.47	470.92	488.51	505.42	524.21
% margin	13.0%	13.2%	17.4%	16.1%	5.2%	4.8%		7.1%	9.1%	10.1%	12.1%	12.6%	13.6%	14.1%	14.1%	14.1%	14.1%
Taxes	79.81	99.39	153.35	155.34	43.58	36.374		66.20657	89.42509	105.6779	135.0898	148.7071	169.0522	182.8105	189.641	196.2053	203.4995
EBIAT	127.59	148.91	235.44	232.16	77.27	77.50	-11.78%	104.34	140.93	166.55	212.90	234.36	266.42	288.11	298.87	309.22	320.71
Plus: Depreciation & Amortization	36.76	45.77	49.85	58.02	65.11	63.74		58.75	61.85	65.83	70.20	74.20	78.13	81.49	84.54	87.46	90.71
Less: Capital Expenditures (net)	-82.306	-83.035	-53.883	-100.807	-73.323	-65.863		-91.7186	-96.5545	-91.9499	-92.2898	-94.502	-96.3018	-100.438	-104.19	-107.797	-111.804
Less: Increase in Net Working Capital	n/a	14.54	-48.71	46.71	36.97	-14.22		-15.78	1.07	0.97	1.41	0.89	1.09	0.82	0.57	0.55	0.61
Unlevered Free Cash Flow		97.109	280.117	142.660	32.092			87.156	105.154	139.455	189.398	213.166	247.170	268.340	278.642	288.329	299.008

**Discount Period** 

**Discount Factor** 

PV of Cashflow

0.5

0.96

83.30

1.5

0.87

91.81

2.5

0.80

111.22 137.98

3.5

0.73

4.5

0.67

141.86

WACC	9.47%
PV of FCF from '13 to '20	1140.38
Terminal Growth	2.00%
PV of Terminal Value	1854.294
Enterprise Value	2994.67
Less: Net Debt	80.34
Equity Value	3075.01
Current Market Cap	1030
Shares outstanding	81.27
Per share	37.84

# Slow correction

		Hist	torical Peri	od				Projection Period									
	2007	<u>2008</u>	<u>2009</u>	<u>2010</u>	<u>2011</u>	LTM	CAGR	<u>2012</u>	<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>2016</u>	<u>2017</u>	<u>2018</u>	<u>2019</u>	<u>2020</u>	<u>2021</u>
Total sales	1590.883	1885.531	2230.105	2400.434	2342.26	2387.437	10.15%	2392	2459	2504	2542	2603	2670	2741	2813	2884	2958
y-o-y growth	n/a	18.5%	18.3%	7.6%	-2.4%	1.9%		2.1%	2.8%	1.8%	1.5%	2.4%	2.6%	2.6%	2.6%	2.5%	2.6%
COGS	1000.92	1185.58	1327.31	1455.55	1661.47	1688.224	13.51%		1708.882	1740.492		1782.778	1815.617	1863.637	1912.931	1960.889	2011.108
GM	37.1%	37.1%	40.5%	39.4%	29.1%	29.3%		30.0%	30.5%	30.5%	31.0%	31.5%	32.0%	32.0%	32.0%	32.0%	32.0%
SG&A	345.81	405.88	464.16	499.37	494.83	521.596	9.37%					567.3658	582.0654		613.2632		
EBITDA	244.15	294.07	438.64	445.51	185.96	177.62	-6.58%	196.11	213.92	217.87	233.88	252.45	272.34	279.55	286.94	294.13	301.67
% margin	15.3%	15.6%	19.7%	18.6%	7.9%	7.4%		8.2%	8.7%	8.7%	9.2%	9.7%	10.2%	10.2%	10.2%	10.2%	10.2%
D&A	36.76	45.77	49.85	58.02	65.11	63.744	15.37%		59.84929	60.95637	61.87796	63.34881	64.99008	66.70899	68.47346		71.98771
EBIT	207.40 13.0%	248.30 13.2%	388.79 17.4%	387.49 16.1%	120.85 5.2%	113.87 4.8%	-12.63%	137.90 5.8%	154.07 6.3%	156.92 6.3%	172.00 6.8%	189.10 7.3%	207.35 7.8%	212.84 7.8%	218.47 7.8%	223.94 7.8%	229.68 7.8%
% margin	13.0%	13.2%	17.4%	10.1%	5.2%	4.0%		5.8%	0.3%	0.3%	0.8%	7.3%	7.6%	7.8%	7.6%	7.8%	7.8%
Taxes	79.81	99.39	153.35	155.34	43.58	36.374		53.53117	59.80958	60.91593	66.77128	73.41011	80.49459	82.62357	84.80898	86.93517	89.16162
EBIAT	127.59	148.91	235.44	232.16	77.27	77.50	-11.78%	84.36	94.26	96.00	105.23	115.69	126.86	130.21	133.66	137.01	140.52
Plus: Depreciation & Amortization	36.76	45.77	49.85	58.02	65.11	63.74		58.21	59.85	60.96	61.88	63.35	64.99	66.71	68.47	70.19	71.99
Less: Capital Expenditures (net)	-82.306	-83.035	-53.883	-100.807	-73.323	-65.863		-90.8789	-93.4353	-85.1464	-81.3494	-80.6805	-80.1007	-82.2193	-84.394	-86.5098	-88.7254
Less: Increase in Net Working Capital	n/a	14.54	-48.71	46.71	36.97	-14.22		-16.15	0.39	0.17	0.29	0.38	0.41	0.27	0.28	0.27	0.29
Unlevered Free Cash Flow		97.109	280.117	142.660	32.092			67.843	60.284	71.644	85.470	97.982	111.334	114.429	117.455	120.414	123.492
WACC	9.47%				Discount P	eriod		0.5	1.5	2.5	3.5	4.5	5.5	6.5	7.5	8.5	9.5
					Discount Fa			0.96	0.87	0.80	0.73	0.67	0.61	0.56	0.51	0.46	0.42
PV of FCF from '13 to '20 Terminal Growth	548.68				PV of Cash	flow		64.84	52.63	57.14	62.27	65.21	67.68	63.54	59.58	55.80	52.27
PV of Terminal Value	2.00% 765.8378																
	100.0010																
Enterprise Value	1314.52																
Less: Net Debt	80.34																
Equity Value	<mark>1394.86</mark>																

1030
81.27
17.16

### Bear case valuation

						Projecti	ons				
	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Avg. sq. ft. per store (ARO)	3700	3716	3735	3754	3773	3791	3810	3829	3849	3868	3887
Avg. sq. ft. per store (P.S.)	3000	3015	3030	3045	3060	3076	3091	3107	3122	3138	3153
Sales per squft.	561	555	553	553	553	553	553	553	553	553	553
Exisiting stores											
Aeropostale	965	986	988	978	978	973	968	968	959	949	949
P.S	47	71	100	50	0	0	0	0	0	0	0
Contribution	2101	2154	2207	2113	2039	2039	2039	2049	2039	2029	2039
Net New stores											
Aeropostale	21	2	0	-10	0	-5	-5	0	-10	-9	0
P.S	24	29	20	10	0	0	0	0	0	0	0
Contribution	60	34	21	-2	0	-7	-7	0	-13	-13	0
Total store count end of year	1057	1088	1108	1028	978	968	964	968	949	940	949
y-o-y growth		2.9%	1.8%	-7.2%	-4.9%	-1.0%	-0.5%	0.5%	-2.0%	-1.0%	1.0%
Total store sales	2160	2188	2228	2111	2039	2033	2033	2049	2026	2016	2039
y-o-y growth		-4.4%	1.8%	-5.3%	-3.4%	-0.3%	0.0%	0.8%	-1.1%	-0.5%	1.1%
Online	182	204	224	242	257	267	275	283	292	300	309
y-o-y growth		12.0%	10.0%	8.0%	6.0%	4.0%	3.0%	3.0%	3.0%	3.0%	3.0%
Total sales	2342	2392	2452	2353	2296	2300	2307	2332	2318	2316	2348
y-o-y growth		2.1%	2.5%	-4.0%	-2.4%	0.2%	0.3%	1.1%	-0.6%	-0.1%	1.4%

<u>2007 2008 2009 2010 2011 LTM CAGR 2012 2013 2014 2015 2016 2017 2018 2019 2020</u>	<u>2021</u>
Total sales 1590.883 1885.531 2230.105 2400.434 2342.26 2387.437 10.15% 2392 2452 2353 2296 2300 2307 2332 2318 2316	2348
y-o-y growth n/a 18.5% 18.3% 7.6% -2.4% 1.9% 2.1% 2.5% -4.0% -2.4% 0.2% 0.3% 1.1% -0.6% -0.1%	1.4%
COGS 1000.92 1185.58 1327.31 1455.55 1661.47 1688.224 13.51% 1674.084 1704.36 1635.389 1584.115 1586.677 1592.168 1609.382 1599.129 1598.108 10	620.257
GM 37.1% 37.1% 40.5% 39.4% 29.1% 29.3% 30.0% 30.5% 30.5% 31.0% 31.0% 31.0% 31.0% 31.0% 31.0%	31.0%
SG&A 345.81 405.88 464.16 499.37 494.83 521.596 9.37% 521.3577 539.5098 517.6771 573.9548 505.8969 507.6477 513.1364 509.8672 509.5417 5	516.6035
EBITDA 244.15 294.07 438.64 445.51 185.96 177.62 -6.58% 196.11 208.45 200.01 137.75 206.96 207.67 209.92 208.58 208.45	211.34
% margin 15.3% 15.6% 19.7% 18.6% 7.9% 7.4% 8.2% 8.5% 6.0% 9.0% 9.0% 9.0% 9.0% 9.0%	9.0%
D&A 36.76 45.77 49.85 58.02 65.11 63.744 15.37% 58.21181 59.69095 57.2754 55.88169 55.97205 56.16575 56.77301 56.41131 56.37531 5	57.15662
EBIT 207.40 248.30 388.79 387.49 120.85 113.87 -12.63% 137.90 148.76 142.74 81.87 150.99 151.51 153.15 152.17 152.07	154.18
% margin 13.0% 13.2% 17.4% 16.1% 5.2% 4.8% 5.8% 6.1% 6.1% 3.6% 6.6% 6.6% 6.6% 6.6%	6.6%
Taxes 79.81 99.39 153.35 155.34 43.58 36.374 53.53117 57.74736 55.41046 31.7811 58.61296 58.8158 59.45172 59.07295 59.03525 59	9.85342
EBIAT 127.59 148.91 235.44 232.16 77.27 77.50 -11.78% 84.36 91.01 87.33 50.09 92.37 92.69 93.69 93.10 93.04	94.33
Plus: Depreciation & Amortization 36.76 45.77 49.85 58.02 65.11 63.74 58.21 59.69 57.28 55.88 55.97 56.17 56.77 56.41 56.38	57.16
Less: Capital Expenditures (net) -82.306 -83.035 -53.883 -100.807 -73.323 -65.863 -90.8789 -93.1881 -80.0046 -73.4662 -71.2855 -69.2247 -69.9731 -69.5273 -69.483 -	-70.4459
Less: Increase in Net Working Capital n/a 14.54 -48.71 46.71 36.97 -14.22 -7.10 0.56 -0.74 -0.32 0.03 0.06 0.19 -0.11 -0.01	0.24
Unlevered Free Cash Flow 97.109 280.117 142.660 32.092 58.795 56.948 65.339 32.826 77.031 79.574 80.307 80.094 79.942	80.797
WACC 9.47% Discount Period 0.5 1.5 2.5 3.5 4.5 5.5 6.5 7.5 8.5	9.5
WACC 9.47% Discount Period 0.5 1.5 2.5 3.5 4.5 5.5 6.5 7.5 8.5   Discount Factor 0.96 0.87 0.80 0.73 0.67 0.61 0.56 0.51 0.46	9.5 0.42

PV of Cashflow

56.19

49.72

52.11

23.91

51.26

48.37

44.59

40.63

37.04

PV of FCF from '13 to '20 Terminal Growth PV of Terminal Value	403.84 2.00% 501.0616
Enterprise Value	904.90
Less: Net Debt	80.34
Equity Value	985.24
Current Market Cap	1030
Shares outstanding	81.27
Per share	12.12

34.20

### **Important Disclaimer**

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