

Rusy		Value Indicators:	EUR	Share data:		Description:	
Buy		DCF:	90.00	Bloomberg:	BOSS GR	Boss is one of the leading g	obal
EUR <b>90.00</b>	(EUR 85.00)			Reuters: ISIN:	BOSSG.DE DE000A1PHFF7	premium fashion brands.	
		Market Snapshot:	EUR m	Shareholders:		Risk Profile (WRe):	2019e
Drice	EUD 60 60	Market cap:	4,395	Freefloat	90.0 %	Beta:	1.1
Price	EUR 63.68	No. of shares (m):	69	Treasury Shares	2.0 %	Price / Book:	4.1 x
Upside	41.3 %	EV:	4,363	Marzotto family	10.0 %	Equity Ratio:	57 %
		Freefloat MC:	3,955				
		Ø Trad. Vol. (30d):	20.52 m				

# Return to double-digit growth

In 2018 the Boss share de-rated substantially. The stock is down some 25% from its 12-month highs amid concerns of a lack of margin expansion in the last two years, fears of a profit warnings and general unease regarding the growth outlook for discretionary consumption. The market is giving Boss little credit for the successful execution of its strategy since 2016.

Earnings in the last two years have admittedly been flattish but this has been necessary to prepare the ground for future margin leverage. Amid a host of profit warnings in the apparel sector, Boss delivered on its original 2018 guidance for stable EBITDA while I-f-I growth reaccelerated in Q4 despite an extraordinarily tough comparison base. Several arguments support our bullish view of the stock:

- Firstly, Boss's I-f-I sales growth has been the best of its closest peers for five straight quarters. Based on two-year I-f-I sales growth CAGR, Boss's outperformance to peers widened even further in Q4 2018. Besides past performance, we expect a significant increase in the contribution of store renovations to I-f-I growth to more than 1.5pp in 2019, i.e. more than 1pp higher than in 2018. In addition, the roll-out of online concessions should ensure that growth in e-commerce sales remains at around 30%, i.e. contributing some 2pp to I-f-I growth. We are thus confident that Boss can maintain I-f-I growth at 5% (2018: 4.7%).
- There is an excellent case for margin expansion in 2019, which quashes one of the main arguments of sceptics. The EUR 160m cost savings programme, even assuming a slightly back-end loaded effect, should lower costs by some 120bp in 2019. While part of the savings will be reinvested in digitalisation, Boss generated net savings of 60bp in the first nine months of 2018, confirming that cost savings should already make a solid contribution in 2019. In addition we see some 60bp upside for gross margin in 2019 as margins benefit from the non-recurrence of incremental investments in quality, normalisation of weather-related headwinds, better sourcing and a positive channel mix. Overall we are therefore confident that Boss can generate 80bp EBIT-margin improvement to 13.0%, which will lead to ca. 12% EBIT growth.
- So far Boss has only released preliminary 2018 sales figures and said that its adj. EBITDA roughly reached the 2017-level. Together with the final 2018 figures we expect Boss to guide for a mid single-digit sales increase in 2019 and double-digit EBIT growth, confirming market expectations of around 10% EBIT growth. Our 2019 EPS estimate of EUR 4.00 (+12%) is some 2% higher than consensus.
- We consider the current valuation as very attractive, as Boss not only trades at a discount of around 10% to its historical (15-year period) median 12-month forward PER of 17.1 but also at a discount of around 20% to its closest peers. While we acknowledge that the current economic expansion is getting long in the tooth, Boss has historically proven that it can also flourish in a late cyclical environment (i.e. 2000/2001). The shareholder-friendly dividend policy (60-80% payout ratio) provides additional support for the share price and the current dividend yield is well over 4% and comfortably covered by free cash flow. As we roll our model one year forward and fully include the 2022 margin target (long-term margin up 50bp to 15%) our DCF-based price target increases by EUR 5 to EUR 90. We therefore reiterate our Buy rating ahead of FY 2018 results.



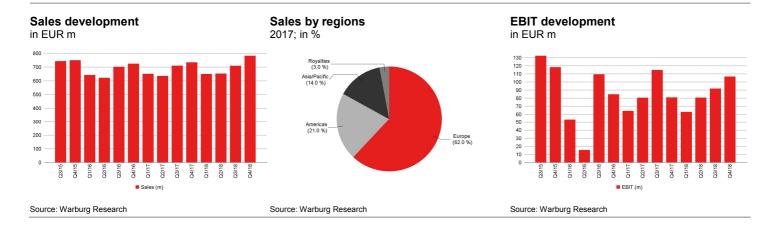
Rel. Performance vs MDAX:	
1 month:	3.9 %
6 months:	-0.6 %
Year to date:	5.3 %
Trailing 12 months:	-2.4 %
Company events:	
• •	
07.03.19	FY 2018
02.05.19	Q1

FY End: 31.12. in EUR m	CAGR (18-21e)	2015	2016	2017	2018	2019e	2020e	2021e
Sales	4.8 %	2,809	2,693	2,733	2,796	2,922	3,068	3,221
Change Sales yoy		9.2 %	-4.1 %	1.5 %	2.3 %	4.5 %	5.0 %	5.0 %
Gross profit margin		66.0 %	66.0 %	66.2 %	65.2 %	65.8 %	66.1 %	66.4 %
EBITDA adj.	9.2 %	594	493	491	487	541	592	634
Margin		21.2 %	18.3 %	18.0 %	17.4 %	18.5 %	19.3 %	19.7 %
EBIŤ	10.7 %	448	264	341	341	381	422	464
Margin		15.9 %	9.8 %	12.5 %	12.2 %	13.0 %	13.7 %	14.4 %
Net income	11.6 %	319	194	231	246	276	310	342
EPS	11.6 %	4.63	2.80	3.35	3.56	4.00	4.49	4.95
EPS adj.	11.6 %	4.67	3.54	3.44	3.60	4.06	4.54	5.00
DPS	11.0 %	3.62	2.60	2.65	2.70	2.95	3.30	3.69
Dividend Yield		3.5 %	4.6 %	3.9 %	3.8 %	4.6 %	5.2 %	5.8 %
FCFPS		3.01	3.19	4.25	2.90	3.78	4.23	4.48
FCF / Market cap		3.7 %	5.7 %	6.8 %	4.3 %	6.1 %	6.8 %	7.2 %
EV / Sales		2.6 x	1.5 x	1.7 x	1.8 x	1.5 x	1.4 x	1.3 x
EV / EBITDA		12.3 x	9.4 x	9.5 x	10.1 x	8.1 x	7.2 x	6.6 x
EV / EBIT		16.1 x	15.5 x	13.9 x	14.4 x	11.5 x	10.1 x	9.1 x
P/E		22.2 x	20.2 x	20.3 x	19.8 x	15.9 x	14.2 x	12.9 x
P / E adj.		22.0 x	16.0 x	19.8 x	19.5 x	15.7 x	14.0 x	12.7 x
FCF Potential Yield		4.7 %	5.2 %	5.3 %	5.4 %	6.8 %	7.7 %	8.6 %
Net Debt		134	174	56	41	-31	-118	-197
ROCE (NOPAT)		33.7 %	18.6 %	23.4 %	25.4 %	27.6 %	30.2 %	32.4 %
Guidance: 2	2022: around	15% EBIT ma	argin					

16.05.19

AGM



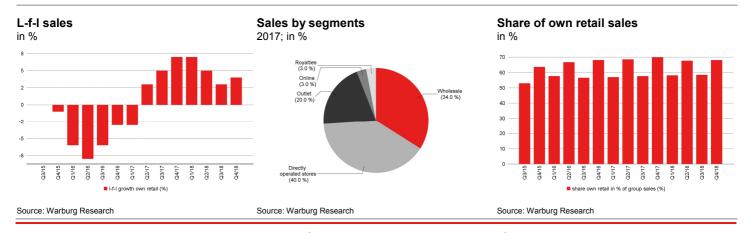


# **Company Background**

- The Hugo Boss group is one of the leading groups in premium fashion. Boss exclusively works with the brands "Hugo" and "Boss". The latter generates more than 90% of group sales.
- Boss achieves more than 85% of sales with menswear. Boss also offers a womenswear collection and an extensive range of accessories. Ca. 2% of sales are generated in the high-margin licence business.
- Boss generates ca. 60% of sales in Europe, more than 20% in the US and 15% in Asia. China already constitutes more than half of the business in Asia.
- Around 25% of the production comes from its own factories. The rest is outsourced. Regionally Boss produces mainly in Eastern Europe, Asia, Western Europe and North America.
- Own retail, with around 1100 stores, generates more than 60% of group sales.

# **Competitive Quality**

- A key success factor is the high brand desirability. This is underpinned by high ranks in brand awareness surveys and commercially proven by the success of its licence business.
- Shortened product development cycles (lead-times) of just 38 weeks enable the company to assess sales data from the corresponding year-earlier season during the design process.
- Value-creating growth with continued area expansion in own retail.
- Outside Europe, growth is achieved by gaining market share in wholesale and further area expansion.





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# **Summary of Investment Case**

#### Investment triggers

- In 2019 we expect the first margin expansion since 2013 (+80bp EBIT margin) and consequently double-digit earnings growth.
- Management guidance, which is to be released on March 7, should back our view.
- We expect a highly attractive dividend of EUR 2.70 for 2018, i.e. a yield of well over 4%.

#### **Valuation**

- We derive a DCF-based value per share of EUR 90.
- Luxury peers trade at more than 20x PER 2019, thus Boss trades at a discount of more than 20%. Even a narrower peer group suggests a similar valuation discount compared to its closest peers, Polo Ralph Lauren and Burberry.

#### Growth

- In 2019, the luxury apparel market is expected to grow at around 3%, i.e. roughly on the 2018 level. While there is a great deal of fear about a potential market slowdown in 2019, growth rates of major luxury players in Q4 2018 exhibit pretty stable momentum.
- In 2019, the Boss top line should however be primarily driven by the roll-out of its new store format and the optimisation of store sizes, which should boost productivity. In addition, the online business should continue to grow by around 30%, as the roll-out of online concessions and improved functionality of its website drive growth. We expect 5% I-f-I growth in own retail.
- The wholesale business already returned to growth last year and managed a 5% sales increase. While we see some headwind from a strong comparison base and the structural burden from the roll-out of concessions, we nevertheless expect this channel to be able to grow by around 3% p.a., as market share should be gained, particularly by the more athleisure-driven Hugo brand.

#### **Profitability**

- In the last 10 years, Boss has generated average EBITDA margins of 20.4% (2009-2018) with a trough of 17.6% (2018; but not as low as in 2009 at 17.1%) and a peak of 23.2% (2013).
- Retail margins suffered during Boss's aggressive store expansion phase. However as Boss is no longer expanding, but rather optimising its store portfolio, retail productivity is set to improve. In addition, a general cost savings programme which targets EUR 160m savings p.a. by 2022 and growth in the higher-margin online business should lead to nearly 3pp EBIT margin increase by 2022 (to around 15%).

### **Competitive quality**

- Key success factor is the high brand desirability. This is underpinned by the company's high rankings in brand awareness surveys and commercially proven by the success of its license business. The latter is has been growing at around twice the rate of group sales even during the difficult 2013-2018 period (5.6% royalties CAGR vs. 2.9% group sales CAGR).
- In its segment of the upper premium menswear market, Boss offers leading value for money and impeccable quality.
- Boss relies on a state-of-the-art logistics backbone and a highly efficient sourcing network.

### Warburg versus consensus

- We estimate EPS 2019 of EUR 4.00 which is slightly ahead of consensus (ca. EUR 3.9)
- The main reason why our forecast exceeds consensus is our expectation of a higher gross margin (we expect an increase of 60bp and consensus, 40bp) on the back positive channel mix effects, better sourcing and the normalisation of the strong weather headwind seen during 2018 (and no more need for incremental investments in product quality).

### Investment risks

- Managing the transition from physical retail to e-commerce.
- Unanticipated shifts in customer preferences.



# **Company Overview**

Segements	Europe	Americas	Asia	Licenses
Sales 2017 in EURm % of total	1681 61,5%	577 21,1%	396 14,5%	79,3 2,9%
EBITDA (before overhead) margin EBIT (overhead pro rata) margin % of total	520,0 30,9% 239,2 14,2% 64,5%	119,0 20,6% 22,6 3,9% 6,1%	90,9 23,0% 24,7 6,2% 6,7%	67,6 85,2% 54,4 68,5% 14,7%
Distribution Wholesale in EURm (2017) % of total Own Retail in EURm (2017) % of total	706 42,0% 975 58,0%	185 32,1% 392 67,9%	32 8,1% 364 91,9%	n.a. n.a.
Split own retail (2017) In EURm % of total	Directly operated Stores 1103,0 63,7%	Outlet 550,0 31,8%	Online 79,0 4,6%	
Product & Brand				
In EURm (2018) % of total	Boss Men 2.517 90,0%	Boss Women 279 10,0%	Boss 2.422 86,6%	Hugo 374 13,4%

#### **Brand Position**



# **Brand values**

Masculinity/Femininity

Sexiness

Success

Style Precision

BOSS dresses the drive.



#### **Brand values**

Globally engaged Always curious Authentically expressive

HUGO is the platform of self-expression.

# Competitors

Upper **Premium** 

Premium





Source: Boss, Warburg Research



# **Harvest Time Is Coming**

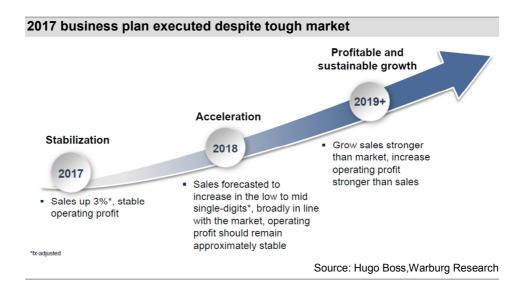
- Revamp of brand architecture has led to strong I-f-I momentum
- Online business has gathered pace (more than 30% growth)
- New store format & store portfolio optimisation to increasingly contribute to growth
- Return to solid growth in China

# Eying 15% EBIT margin by 2022, implying double-digit EBIT CAGR

# Key measures successfully implemented

Following the profit warning and departure of CEO Lahrs in early 2016, Boss revamped its strategy. By now, all the key changes have been implemented and the company is solely focussing on the Boss and Hugo brand. The Boss Orange and Boss Green offerings have been integrated into the main lines. The price architecture has been largely harmonised – particularly within the Eurozone. While Chinese prices are still around 40% higher than in Europe this is, to a large extent, due to tariffs and a far cry from the previous premium of around 100%. After cutting off-price distribution in the US, business in the region is growing again. A new store format for retail has been developed which includes online ordering from stores and other omnichannel services. Finally Boss has invested in its digital capabilities, not only increasing the content of its web offering but also pushing digital projects like a first digital collection (i.e. digital product development and virtual showroom).

While the margin still declined around 40bp in 2018 (on adj. EBITDA level), Boss has executed according to its projections at the August 2017 investor day. Thus Boss should return to margin growth in 2019.



Indeed at its capital markets day in November 2018, Boss outlined ambitious targets for top-line CAGR of 5% to 7% and EBIT margin of 15% (excluding the effects of IRS 16). At the mid-point of the sales CAGR, i.e. at 6% sales growth, the margin target translates into nearly 12% EBIT CAGR until 2022. As the share price is still not reflecting this positive growth outlook, we should take a closer look at the driving forces behind this growth.



## **Management targets for 2022**







Source: Hugo Boss, Warburg Research

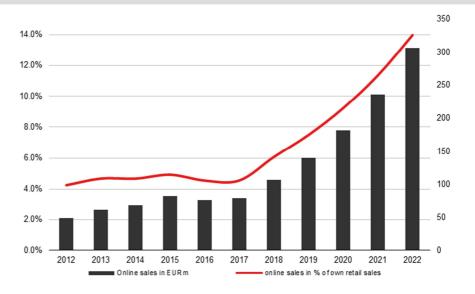
# Growth drivers for 2019 and beyond

#### Online to provide strong margin leverage

In the last couple of years, the online business has been a burden, for the most part. In the very beginning, the fulfilment was outsourced to netrada, which unfortunately had to file for bankruptcy in 2014, forcing Boss to rapidly insource operations. While the focus was on the logistical side, Boss was rather a late-comer to mobile commerce and thus online sales performed poorly in 2015 and 2016. Now, however, the logistics infrastructure is working well and can serve all of Europe (dedicated online warehouse close to headquarters in Metzingen). In late 2017, Boss also closed the gapping holes in mobile commerce (android app only launched in November 2017). With improved website content, faster page-loading, wellfunctioning mobile apps etc. the front end of operations is now also up to speed. In addition, features like personalised product recommendations, a chat function for personal advice and a fitting function are driving sales. Thus the online sales growth of nearly 40% in constant currency in fiscal 2018 (37% in Q4 2018) should be no flash in the pan. In 2019 we expect another 30% growth in online sales which should than reach around 7.5% of total retail sales. In addition to the strong momentum at the end of 2018, the conversion of Zalando (previously wholesale customer) to an online concession should provide an additional boost to sales. There are two advantages to converting wholesale online sales into concessions: firstly Boss will enlarge the available product range (in the case of Zalando, businesswear was added to the offering in Q4 2018); secondly Boss will keep the retail gross margin in-house. Due to the size of the retail mark-up (i.e. >100% of wholesale price based on suggested retail price) these effects are significant and thus the conversion of online wholesale into a concession should lead to a doubling of sales even without volume growth. Overall, Boss generates around EUR 100m of wholesale revenues which are later sold online by third parties. While not all of these sales can be shifted to a concession model, a conversion of around 50% would lead to additional sales of EUR 100m (or nearly 50% of the online growth we forecast until 2022).



#### Boss online sales are back on track



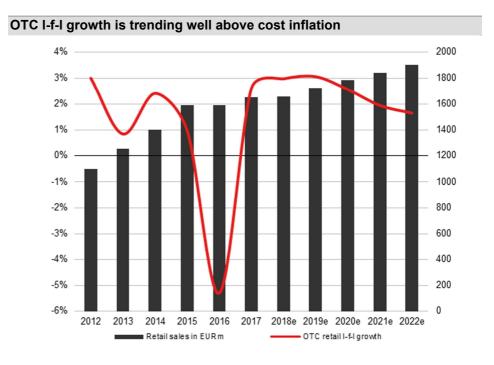
Source: Hugo Boss, Warburg Research

The key positive of rapid online sales at the current stage is the high marginal profitability of these operations as, by now, the variable costs should consist largely of cost of goods sold and fulfilment expenses. For Boss retail we assume a gross margin of around 75% and we estimate that fulfilment expenses should be, at most, EUR 20 per order (Zalando is around EUR 13). In contrast to Zalando, Hugo Boss is mainly (90%) a menswear business, which means that return rates are lower than at Zalando. Despite Boss's smaller scale, our estimate of fulfilment costs should be rather conservative. On the other hand due to its price positioning, we estimate that the Boss average basket size exceeds EUR 150 (i.e. more than twice the Zalando level). Therefore we estimate that the contribution margin of online sales should currently even slightly exceed 60%. Based on our estimate of 30% sales growth in 2019, this is equivalent to more than EUR 18m incremental contribution margin (or more than 40% of the expected 2019 EBIT increase). Admittedly, as we expect Boss to invest further in digitalisation, some cost increases should counter this effect. Nevertheless this clearly shows the margin-accretive effect of online growth.



# Retail: Improving sales density is a key target

A key part of the Boss strategy is an improvement in sales density. In 2017 Boss was already presenting a target of a 20%-increase in sales density to around EUR 13,000 per sqm by 2021 (from a 2016 level of around EUR 10,900 per sqm). With its strategy update in November 2018 the target was reformulated to 4% sales density increase p.a. until 2022, which basically means maintaining the same growth trajectory for the 2018 to 2022 period.

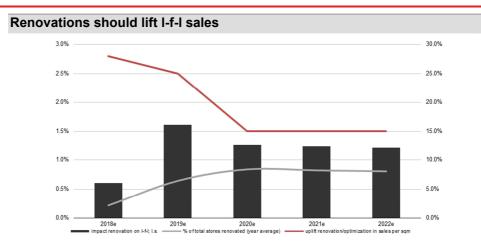


Source: Hugo Boss, Warburg Research

We expect the sales density of stationary stores to continue to improve based on a number of factors. Firstly, Boss is generally striving for higher space productivity with a lower average store size by replacing larger stores with smaller ones. Secondly, the new store format will gradually be rolled out. In 2018 Boss converted an estimated 50 stores (of around 1100). In 2019 we would expect remodelling of around 100 stores. This could contribute around 1 percentage point to I-f-I growth in 2019. Thirdly, the roll-out of omni-channel services and the improved product offering with a higher share of casual products will contribute to this improvement.

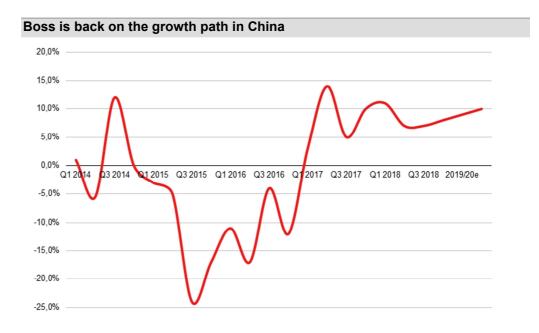
Based on OTC I-f-I growth of 3%, Boss' sales growth should well outpace cost inflation. The generally weaker retail environment means that rent inflation for retail space is a thing of the past and we should even see a slight decline in rents as maturing rental contracts are prolonged under more favourable terms. Therefore even assuming wage inflation of around 3% p.a. this should lead to underlying cost growth of around 2% (i.e. cost growth based on constant selling space). Therefore OTC retail EBIT margins should improve by around 50bp which should lead to around 30bp EBIT margin improvement on group level annually.





Source: Hugo Boss, Warburg Research

# **China: Biggest opportunity**



Source: Hugo Boss, Warburg Research

Particularly due to hangover from the big Chinese expansion from 2008 to 2012, which led to a quadrupling of Boss sales in the region in just four years, investors still have mixed feelings about China. The initially successful strategy of former CEO Lahrs, to position the Boss brand at a substantially higher level in China than elsewhere in the world (premium of more than 100%), backfired when Boss had to start slashing prices. It started with a price cut of 10% in fall 2015 followed by a 20% price cut in early 2016. Thus the price difference to Europe (France) has now narrowed to a premium of just around 40%. Since annualising the price cuts in China in Q1 2017 Boss has consistently reported high single-digit sales growth in China, although there was only minimal space growth (below 2%). This trend continued in Q4 2018, as Boss again delivered high single-digit I-f-I sales growth.

While current investor sentiment towards China is rather negative, substantial consumption stimulus in China is addressing the Boss target group. Chinese personal income tax was cut substantially as of October 1, 2018 which should strengthen purchasing power, especially of the Chinese middle class. As of a monthly pre-tax income of 35000 RMB (ca EUR 4300), tax



payers benefit from a maximum tax reduction, which will amount to around EUR 200 per month. Furthermore, as of Jan 1, 2019 there will be a substantial increase in the opportunity for the tax deduction of costs (e.g. up to 1000 RMB per month interest deduction for mortgages, deduction for education expenses etc.). The combination of increasing Chinese disposable income as a result of tax breaks and a crack-down on illegal imports by the customs authorities in China should bolster growth of the Chinese market.

Boss's growth in the region will be driven by an increase in retail space, i.e. reallocation of selling space to Asia as store sizes are reduced in Western Europe. In addition Boss will intensify the cooperation with the leading online platforms (Tmall.com and JD.com) and increase the range of products available on these platforms. Finally travel retail (e.g. in airports, inflight, on cruise ships) still offers room for expansion.

# Digitalisation to optimise business processes

Digitalisation is not only affecting Boss with the tidal wave of online sales, but it is also having a profound impact on core operations. This starts on the demand side where algorithms are used to track trends in colour, styles, and music as an aid to designers.

The most obvious is the digital development of the collection, which saves prototyping and sampling costs. Development times have been reduced drastically from up to eight months previously to about six weeks until handover (until shelf, add another seven months for production, logistics and marketing). For the digital collection Boss is mostly using new styles and relies on known materials to reduce the risk. For example, in June 2018 Boss went live with a digital material library that contains a growing selection of fabrics and trimmings. For the wholesale business, Boss has developed a digital showroom that has been rolled out for the Hugo brand and is to be implemented for the Boss brand in 2019. For its own retail business Boss is experimenting with algorithms for the optimisation of markdown management, which should improve full price sell-through. Finally the switch to online marketing is already pretty much a reality for Boss, as in 2017 online already accounted for 70% of marketing vs. 30% for print. While this is expected to increase to more than 75% by 2022, this transformation is largely complete.

#### Digitalisation offers multiple opportunities along the value chain



Source: Hugo Boss, Warburg Research

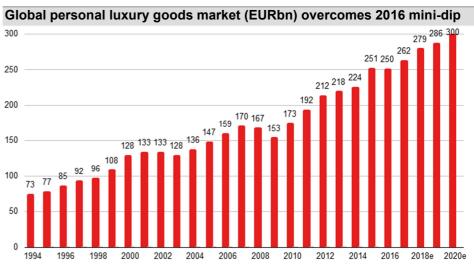
#### Conclusion

Despite heightened economic risks Boss has, in our view, significant company-specific drivers for further sales and earnings growth.



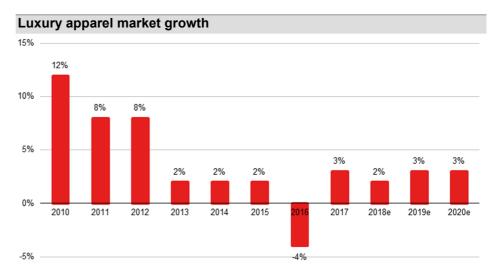
Mid single-digit growth expected for personal luxury market

# Benchmarking & Markets Rebound of luxury apparel market



Source: Bain & Altagamma, Warburg Research

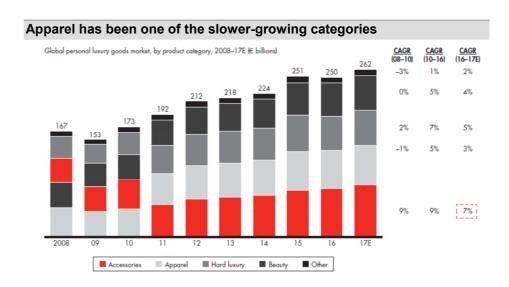
As clearly confirmed in the chart above, the market for luxury goods is growing. The market declined only during global recessions, such as in 2001-2003 with the end of the dot.com boom or during the global financial crisis in 2008/09. A rare exception was the 2016-decline as the Chinese crack-down on corruption and gifting led to a small dip in the luxury goods market. On the back of a recovery in US consumption, a rebound in Chinese spending and continued resilience in Europe, there was a rebound in the personal luxury market in 2017/18, with growth of some 5%. For the period 2019-2020, Bain estimates a CAGR of 3-5% on expectations that a growing Chinese middle class and a generally healthier mark-down environment will lead to higher growth levels. Within the apparel category, the luxury sector has been even weaker than the overall market in the last couple of years. Nevertheless as the underperformance in 2018 was exacerbated by adverse weather trends, we expect a slight growth rebound in 2019.



Source: Boss, Bain & Altagamma, Warburg Research

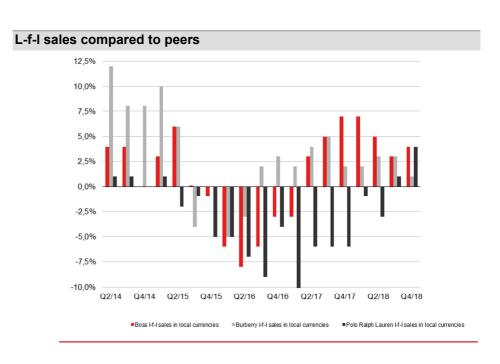


Apparel, which constitutes around 23% of the personal luxury market, was the second-weakest component of the personal luxury market in 2016/17. Accessories remain the fastest-growing part of the market (around 7% growth). This largely explains the strong momentum of luxury bellwethers like LVMH and Kering. Accessories account for around 10% of Boss sales and generate around EUR 80m royalty income (23% of EBIT) primarily in the sub-categories of beauty (fragrances), (sun-) glasses and watches. As Boss is not exclusively exposed to the apparel market, growth of its relevant markets is closer to 4% than the 3% of the apparel category.



Source: Bain & Co

# Boss is outperforming its key peers

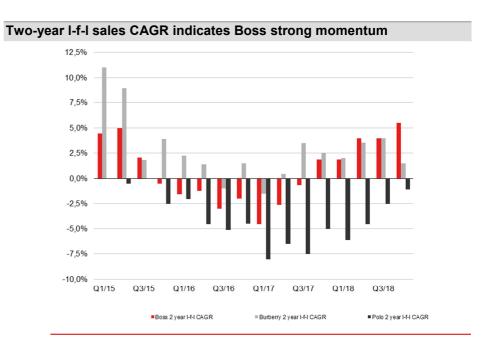


Source: Warburg Research

Since Q3 2017 and compared to its closest peers, Boss I-f-I sales growth is second to none. This is even more remarkable considering that since Q2 2018, Boss has had much tougher prior-year comparables than e.g. Ralph Lauren, which is still comparing to highly

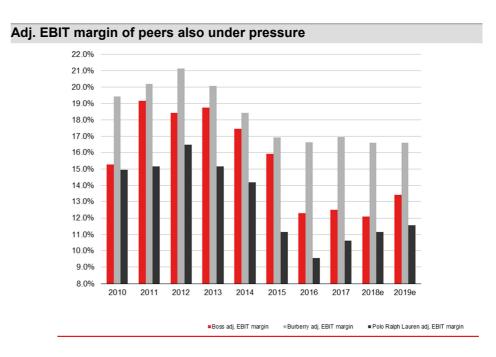


negative year-earlier figures. Indeed, if we look at the two-year CAGR of Boss compared to its key peers, the strength of Boss's performance becomes even more obvious.



Source: Warburg Research

In the last couple of years, Boss margin development has come under intensive scrutiny. However, a closer look confirms that Boss margin development has been largely in line with peers.

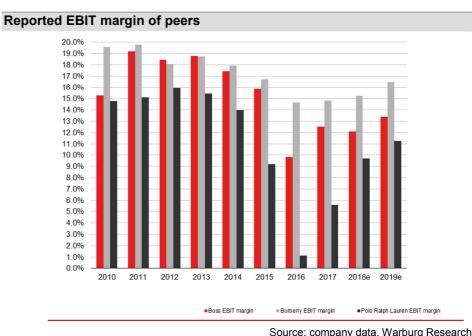


Source: company data, Warburg Research

Since 2013, when sector growth slowed, EBIT margins have generally been under pressure, not only for Boss but also for its key peers. Boss's average EBIT margin in the period 2010 to 2015 was 17.5%. In 2017 Boss generated a margin of 12.5% which we

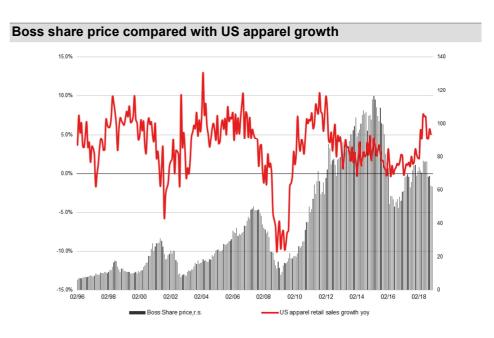


expect to decline by 30bp in 2018. Thus Boss 2018 margin is down 5.4pp compared to the average of the last six years, which looks more severe than for peers such as Burberry (-2.7pp) and Polo Ralph Lauren (-3.4pp). While Burberry has indeed been doing better than Boss, Polo's better adj. margin is mostly the result of a lower earnings quality (booking very large one-time charges in 2016/2017 which then supported the earnings recovery in 2018; compare the chart of depicting reported EBIT below).



Source: company data, Warburg Research

## Late cyclical dynamics



Source: Datastream, Warburg Research

Currently one of the main concerns is the rising risk of recession, as most market participations consider the current expansion very mature. Obviously we would not rule



out that the weakening leading indicators could develop into a broad-based recession, however as can be seen in the chart above, the Boss share has a considerable life of its own. While the broad-based contractions after the September 11 (2001) or the financial crisis hit the Boss share hard, the first 18 months of the dot.com recession were a prosperous period for Boss. Bearing in mind that Boss now stands ready to reap the rewards of major restructuring after a period of brand weakness, we now see considerable brand momentum and Boss should therefore outperform its market.



## Growth

- Online growth & new store concept to drive mid single-digit sales growth in 2019
- Gross margin should rebound in 2019 in light of the absence of 2018 burdens and improvements driven by channel mix, sourcing, and SKU reduction
- Cost savings programme should more than compensate for digitalisation expenditure
- Expect free cash flow to increase form EUR 260m in 2019 to EUR 340m by 2022

#### Return to margin improvement in 2019

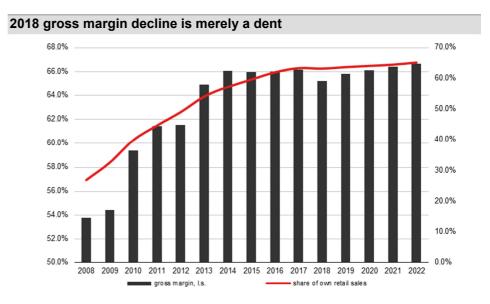
# Anticipating double-digit earnings growth in 2019

Particularly after the weak Q3 2018, when EBITDA declined 12%, the market worried that Boss would not reach its FY 2018 guidance for a stable EBITDA (+/-2%). With its preliminary FY 2018 sales figures, however, management confirmed its guidance and said that 2018 EBITDA would roughly reach the prior year's level, which implies around 10% EBITDA growth for Q4. While Q4 2018 earnings benefited from early deliveries, we estimate that even excluding this effect, Boss generated mid to high single-digit EBITDA growth in Q4 and thus reached its 2018 guidance.

#### Looking for mid single-digit I-f-I growth in 2019

In 2019 we are anticipating constant currency sales growth of around 4.5%, i.e. marginally higher than the 4% sales growth in 2018. At current exchange rates, we expect no negative currency effect in 2019, whereas in 2018 Boss had to weather a currency headwind of 2pp. Our figures are based on 5% I-f-I growth in own retail (4.7% in 2018) and wholesale growth of 3% (2018: 5%). We expect wholesale growth to slow somewhat, as it shoulders the combined effect of the start of online concessions and pre-deliveries at the end of Q4 2018.

#### Good case for gross margin increase in 2019



Source: Boss, Warburg Research

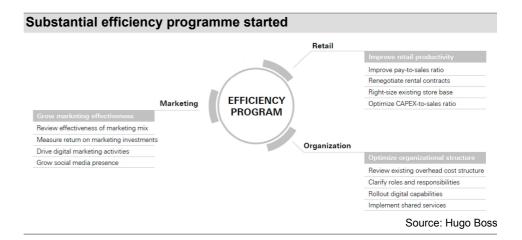


The main reason for the EBIT margin decline in 2018 was a lower gross margin. To some extent, this was driven by planned investments in a higher product quality and negative currency effects. However, this was not the main reason as in H1 2018, Boss managed to limit this decline to around 50bp (despite a very tough winter which delayed the start of the spring season). The big hit was the abnormally long and hot summer. This led to an extended summer discount season, which basically lasted for the entire third quarter and reduced the Q3 gross margin by some 240bp which is, in our view, equitant to a negative effect of around 40bp on a full-year basis.

In 2019, we see several positive factors for the gross margin. Firstly, the non-recurrence of the abnormal summer sale will add around 40bp to the full-year gross margin. Better sourcing conditions (i.e. devaluation of the Turkish Lira) and a slight rise in the share of own retail sales should each add 10bp to the gross margin. We therefore expect a gross margin improvement of 60bp in 2019. This calculation does not even assume any material benefits from a continuing reduction in complexity (target of 30% less SKUs). In the year 2020 and thereafter we expect complexity reduction, a positive channel mix and a higher share of full price sales will lead to a 30bp p.a. gross margin increase on average.

#### Cost savings should support a margin rebound

At its capital markets day in November 2018, Boss announced a massive cost savings programme which targets annual savings of EUR 160m by 2022. Due to the ongoing nature of the programme, the progress should be continuous in character and the incremental savings therefore rather evenly distributed over the years. Based on the sales growth, we assume the cost savings programme alone amounts to 120 to 130bp cost savings annually.

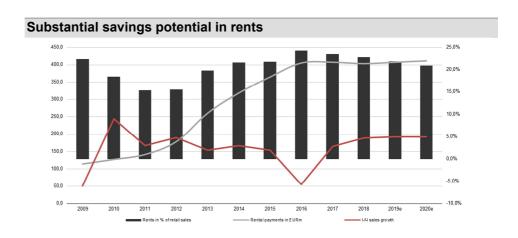


In our view the biggest potential for savings is in retail expenses, as the costs of the own retail network already represent around 33% of sales (i.e. over EUR 900m). As much as we like measures to improve the pay/sales ratio by rolling out the highly successful UK model globally, we see greatest potential in the reduction of rents. This can be illustrated by going back a bit in the history of Boss.

Particularly in 2012 and 2013, the Boss store network grew strongly and the number of directly operated Boss stores grew from 604 to 1050 in this time-frame. With a time lag, this also led to an explosion of rental payments. Although Boss does not specify the rent costs attributable to retail in its financial reporting, it is probably safe to assume that the vast majority of the increase in rental costs was for retail space. Rental payments as a percentage of retail sales rose strongly from the 2011-level of 15.4% and only peaked in 2016 at a level of 24.3%. This reflected the poor performance of new stores, i.e. relative to sales, the rent was too high. On the back of the 2017 I-f-I rebound and shut-down of



underperforming stores, the rental expenses/retail sales ratio improved 80bp to 23.5%. In our view, there is room for further improvement of this ratio. Even on a global basis prime retail rents are virtually stable compared with the low to mid single-digit growth two years ago (e.g. CBRE estimates 0.7% global growth for the TTM to 30.06.2018, compared with +3.7% for the TTM period to 30.06.2016). Thus we assume only marginal increases in rent per square metre as of 2019 (+0.5% p.a.). Additionally, the combination of a reduction in the average store size and positive I-f-I sales further improves the ratio. This leads to a decline of around 80bp in rent to retail sales. Bearing in mind that retail accounts for more than 63% of group sales this improvement already translates into 50bp EBIT margin improvement annually.



Source: Warburg Research

#### 2019 EBIT margin increase should lend credibility to 2022 target

On the back of our expectation of a 60bp gross margin improvement and a modest 20bp improvement in selling & general administrative expenses we forecast an EBIT margin increase of 80bp to 13.0% in 2019. Therefore we expect double-digit EBIT and EPS growth in 2019.

This should be an important milestone as not only will this be the first margin increase since 2016 but it will also show that Boss is off to a good start as regards meeting its 2022 target of 15% margin. To hit its target, Boss needs to generate less than 70bp margin growth in the remaining three years. Bearing in mind Boss's cost savings target of around 120bp p.a. and further gross margin expansion, there is still ample scope for expenses tied to digitalisation. Therefore, we are comfortable with management targets and expect Boss to deliver.

EBIT margin drivers until 2022 (in bps)												
Margin drivers 2018e 2019e 2020e 2021e 2022e												
gross margin change	-94	57	30	30	25							
impact cost savings program	110	120	124	130	133							
digital investments/ other cost increases	-42	-94	-83	-95	-97							
Total margin change	-27	82	70	66	61							

Source: Warburg Research



## Free cash flow should support attractive dividend

As Boss invested heavily in its logistics infrastructure in the last three years by building a new distribution centre for flat goods (2014) and an e-commerce facility, we see little need for further investment in this area in the near term. Furthermore, Boss intends only minimal retail space growth (no more than mid single-digit cumulative growth until 2022) which implies only a low level of capex. Capex for store renovation, however, will rise as the retail network ages, but we still expect the ratio of capex to sales to decline and to remain at around 6% of sales, i.e. only around 50bp above depreciation.

In light of the elevated inventory situation in 2018 and the measures to reduce complexity, we expect only a small net working capital increase of around EUR 50m until the end of 2022. Consequently free cash flow will largely reflect the increase in earnings until 2022, i.e. we expect free cash flow to rise from EUR 260m in 2019 to EUR 340m in 2022, or EUR 3.77 to EUR 4.93 per share. Management targets FCF of EUR 250-350m in the period. FCF should thus comfortably cover the targeted payout ratio of 60-80%. Based on a payout ratio of around 75% we expect the dividend to increase from EUR 2.70 for 2018 (expected) to EUR 4.00 for 2022. Already the 2018 dividend is equivalent to a yield of around 4.2%, which we deem highly attractive in the current low interest rate environment.



## **Valuation**

- Boss trades at discount to its historical average forward PER (12m) of 17.1
- Boss trades at discount of around 20% to its closest peers
- Boss offers an attractive dividend yield of more than 4%
- Our DCF model, based on the 2022 margin target of 15%, yields a fair value of EUR

# Attractive dividend and valuation discount to peers

#### Attractive valuation

#### Discount of around 20% to closest peers

The tough market environment leads to weak growth/declining EPS particularly for vertical fashion retailers, whereas the core luxury peers, which have rather low exposure to apparel, are thriving. Large luxury groups such as LVMH and Kering are generating strong double-digit EPS growth. We prefer to focus on Polo Ralph Lauren and Burberry as the most suitable companies for comparison. Although Boss has been growing faster than these two competitors, it nevertheless trades at a substantial discount to these peers. This is particularly strange in light of the weak earnings quality of Polo Ralph Lauren, as discussed in the benchmarking chapter, and Burberry's change of strategy. Burberry intends to position itself as a true luxury brand rather than an aspirational brand. This looks like a strategy that could back-fire considering the current broad consensus that we are in the late stage of the business cycle. In light of a double-digit discount to peers based on PER 2019 we therefore regard the Boss share as attractively valued, particularly in light of the expected return to double-digit EPS growth in 2019 & 2020.

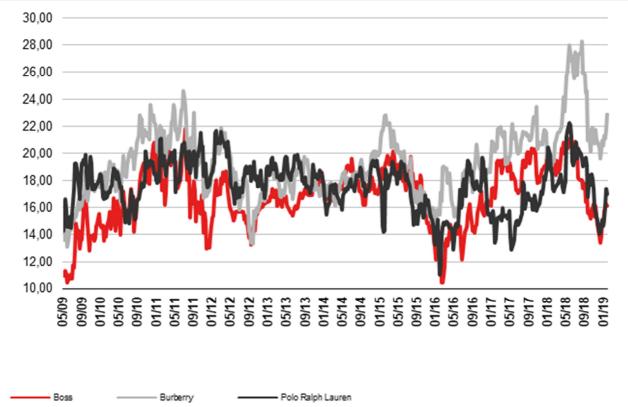
	valua											
	Price	Ev/Sales '19	Ev/EBITDA '19	Ev/EBITDA'20	Ev/EBIT '19	Ev/EBIT '20	P/E '19	P/E '20	EPS growth '19	EPS growth '20	Sales CAGR 17-20	EBIT margin 2019e
Burberry	19,5	2,70	12,7	11,6	16,4	15,0	23,0	20,9	4,1%	10,5%	2,0%	16,5%
Ralph Lauren	125,3	1,41	8,7	8,1	12,0	10,9	16,9	15,3	9,5%	10,8%	1,7%	11,8%
LVMH	297,0	3,10	11,9	11,1	14,3	13,3	21,1	19,3	11,8%	8,9%	8,4%	21,6%
Kering	474,5	3,97	12,0	11,0	13,4	12,2	17,9	16,2	18,8%	10,0%	2,7%	29,5%
Ted Baker	19,5	1,51	9,4	8,7	12,5	11,3	14,2	13,1	6,6%	8,4%	6,4%	12,2%
Tod's	43,6	1,53	11,4	10,0	18,1	15,4	25,6	22,4	6,4%	14,5%	1,5%	8,5%
Ferragam o	18,6	2,18	13,7	12,2	19,4	16,9	28,6	24,2	7,4%	18,5%	1,7%	11,2%
Median Luxury		2,18	11,9	11,0	14,3	13,3	21,1	19,3	7,4%	10,5%	2,0%	12,2%
PVH	113,9	1,17	8,5	8,1	11,4	10,7	11,1	10,1	9,2%	10,3%	4,8%	10,3%
V.F. Corp	86,2	2,55	15,6	14,0	18,1	16,2	20,9	18,5	19,2%	13,2%	15,6%	14,1%
H&M	139,9	1,08	9,0	8,5	14,9	13,9	18,5	17,4	-1,0%	6,0%	4,4%	7,3%
Inditex	25,5	2,58	12,1	11,2	15,1	13,8	20,7	19,2	10,1%	8,0%	6,8%	17,1%
Median Mass Mark	et	1,86	10,5	9,8	15,0	13,9	19,6	18,0	9,6%	9,2%	5,8%	12,2%
Median total		2,18	11,9	11,0	14,3	13,3	20,9	18,5	0,09	10,5%	2,7%	12,2%
Boss cons.	63,68	1,57	8,6	8,0	12,2	11,0	16,0	14,5	13,4%	10,2%	3,9%	12,8%
Boss WR	63,68	1,57	8,5	7,7	12,0	10,9	15,9	14,2	12,4%	12,3%	3,9%	13,0%

Mean revision of margins and slight sales growth already lead to a fair value of EUR 90

Our DCF shows even greater upside, as we believe it is realistic to expect a recovery of the EBITDA margin in the mid term to 20.5%, which is the average of the period 2005-2015. As growth is dependent on an improvement in space productivity rather than an expansion of the store network, we assume a slight moderation of top-line growth to 4% in the transition period. To reflect the tainted track record, we assume a beta of 1.1, resulting in a WACC of 7.3%. Based on these key assumptions we derive a DCF-based fair value of EUR 90.







Source: Datastream, Warburg Research

# **Hugo Boss**



DCF model														
	Detaile	d forecas	t period				7	ransition	al period					Term. Value
Figures in EUR m	2019e	2020e	2021e	2022e	2023e	2024e	2025e	2026e	2027e	2028e	2029e	2030e	2031e	
Sales	2,922	3,068	3,221	3,382	3,551	3,729	3,916	4,111	4,276	4,404	4,536	4,672	4,812	
Sales change	4.5 %	5.0 %	5.0 %	5.0 %	5.0 %	5.0 %	5.0 %	5.0 %	4.0 %	3.0 %	3.0 %	3.0 %	3.0 %	1.0 %
EBIT	381	422	464	507	533	559	587	617	641	661	680	701	722	
EBIT-margin	13.0 %	13.7 %	14.4 %	15.0 %	15.0 %	15.0 %	15.0 %	15.0 %	15.0 %	15.0 %	15.0 %	15.0 %	15.0 %	
Tax rate (EBT)	25.5 %	25.0 %	25.0 %	25.0 %	25.0 %	25.0 %	25.0 %	25.0 %	25.0 %	25.0 %	25.0 %	25.0 %	25.0 %	
NOPAT	286	318	350	381	400	420	440	463	481	495	510	526	541	
Depreciation	160	170	170	186	195	205	215	226	235	242	249	257	265	
in % of Sales	5.5 %	5.5 %	5.3 %	5.5 %	5.5 %	5.5 %	5.5 %	5.5 %	5.5 %	5.5 %	5.5 %	5.5 %	5.5 %	
Changes in provisions	11	13	14	3	1	1	1	1	1	1	1	1	1	
Change in Liquidity from														
- Working Capital	-12	-5	10	27	12	12	13	14	12	9	9	10	10	
- Capex	190	195	195	203	213	224	235	247	257	264	272	280	289	
Capex in % of Sales	6.5 %	6.4 %	6.1 %	6.0 %	6.0 %	6.0 %	6.0 %	6.0 %	6.0 %	6.0 %	6.0 %	6.0 %	6.0 %	
Other	0	0	0	0	0	0	0	0	0	0	0	0	0	
Free Cash Flow (WACC Model)	280	312	329	339	371	389	409	429	449	465	479	493	508	495
PV of FCF	264	273	269	258	263	257	251	245	239	230	221	212	203	3,093
share of PVs		12.83 %						37.90	) %					49.27 %

Model parameter				Valuation (m)			
Derivation of WACC:		Derivation of Beta:		Present values 2031e	3,185		
				Terminal Value	3,093		
Debt ratio	2.50 %	Financial Strength	1.15	Financial liabilities	132		
Cost of debt (after tax)	2.3 %	Liquidity (share)	1.00	Pension liabilities	40		
Market return	7.00 %	Cyclicality	1.40	Hybrid capital	0		
Risk free rate	1.50 %	Transparency	0.95	Minority interest	0		
		Others	1.00	Market val. of investments	0		
				Liquidity	116	No. of shares (m)	69.0
WACC	7.40 %	Beta	1.10	Equity Value	6,222	Value per share (EUR)	90.16

Sens	itivity Va	lue per Sh	are (EUR)	)													
		Terminal (	Growth								Delta EBIT	ī-margin					
Beta	WACC	0.25 %	0.50 %	0.75 %	1.00 %	1.25 %	1.50 %	1.75 %	Beta	WACC	-1.5 pp	-1.0 pp	-0.5 pp	+0.0 pp	+0.5 pp	+1.0 pp	+1.5 pp
1.28	8.4 %	73.91	74.90	75.95	77.07	78.28	79.57	80.96	1.28	8.4 %	68.52	71.37	74.22	77.07	79.92	82.77	85.62
1.19	7.9 %	79.30	80.49	81.77	83.13	84.61	86.19	87.91	1.19	7.9 %	73.92	76.99	80.06	83.13	86.21	89.28	92.35
1.14	7.7 %	82.27	83.58	85.00	86.51	88.15	89.92	91.83	1.14	7.7 %	76.93	80.12	83.32	86.51	89.71	92.90	96.10
1.10	7.4 %	85.46	86.91	88.47	90.16	91.98	93.95	96.11	1.10	7.4 %	80.17	83.50	86.83	90.16	93.49	96.82	100.14
1.05	7.2 %	88.88	90.49	92.23	94.10	96.14	98.36	100.78	1.05	7.2 %	83.68	87.16	90.63	94.10	97.58	101.05	104.52
1.00	6.9 %	92.57	94.36	96.29	98.39	100.67	103.17	105.90	1.00	6.9 %	87.50	91.13	94.76	98.39	102.02	105.65	109.28
0.91	6.4 %	100.86	103.09	105.51	108.16	111.07	114.27	117.82	0.91	6.4 %	96.19	100.18	104.17	108.16	112.15	116.14	120.13

- We have assumed a beta of around 1.1.
- We assume a long term EBITDA margin of 20.5%, i.e. 250bp below the 2012 to 2014 average
- In the transition period we expect a sales CAGR around 4.0%.



## **Free Cash Flow Value Potential**

Warburg Research's valuation tool "FCF Value Potential" reflects the ability of the company to generate sustainable free cash flows. It is based on the "FCF potential" - a FCF "ex growth" figure - which assumes unchanged working capital and pure maintenance capex. A value indication is derived via the perpetuity of a given year's "FCF potential" with consideration of the weighted costs of capital. The fluctuating value indications over time add a timing element to the DCF model (our preferred valuation tool).

in EUR m	2015	2016	2017	2018	2019e	2020e	2021e
Net Income before minorities	319	194	231	246	276	310	342
+ Depreciation + Amortisation	142	169	159	146	160	170	170
- Net Interest Income	-6	-2	-3	-4	-4	-4	-4
- Maintenance Capex	128	152	143	131	144	153	153
+ Other	0	0	0	0	0	0	0
= Free Cash Flow Potential	340	213	250	264	296	330	362
FCF Potential Yield (on market EV)	4.7 %	5.2 %	5.3 %	5.4 %	6.8 %	7.7 %	8.6 %
WACC	7.40 %	7.40 %	7.40 %	7.40 %	7.40 %	7.40 %	7.40 %
= Enterprise Value (EV)	7,227	4,083	4,753	4,901	4,363	4,277	4,198
= Fair Enterprise Value	4,587	2,874	3,375	3,563	3,997	4,463	4,891
- Net Debt (Cash)	-1	-1	-1	-1	-76	-164	-245
- Pension Liabilities	42	42	42	42	44	46	49
- Other	0	0	0	0	0	0	0
<ul> <li>Market value of minorities</li> </ul>	0	0	0	0	0	0	0
+ Market value of investments	0	0	0	0	0	0	0
= Fair Market Capitalisation	4,547	2,834	3,334	3,523	4,029	4,581	5,088
Number of shares, average	69	69	69	69	69	69	69
= Fair value per share (EUR)	65.88	41.06	48.31	51.04	58.38	66.38	73.72
premium (-) / discount (+) in %					-8.3 %	4.2 %	15.8 %
Sensitivity Fair value per Share (EUR)							
10.40	% 46.71	29.04	34.21	36.15	41.67	47.72	53.28
9.40	% 51.74	32.20	37.91	40.06	46.05	52.62	58.64
8.40		36.10	42.49	44.90	51.48	58.68	65.28
WACC 7.40		41.06	48.31	51.04	58.38	66.38	73.72
6.40		47.56	55.95	59.11	67.42	76.48	84.79
5.40		56.48	66.42	70.16	79.82	90.32	99.96
4.40	% 111.18	69.44	81.64	86.23	97.85	110.45	0.00

<sup>•</sup> As high value is attached to brand growth potential, the short-term focus of the FCF model leads to lower values.

# **Hugo Boss**



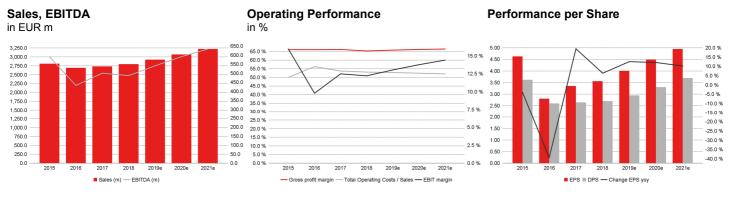
Valuation							
	2015	2016	2017	2018	2019e	2020e	2021€
Price / Book	7.4 x	4.4 x	5.1 x	5.0 x	4.1 x	3.7 x	3.4 x
Book value per share ex intangibles	11.21	10.16	10.61	11.56	12.91	14.50	16.18
EV / Sales	2.6 x	1.5 x	1.7 x	1.8 x	1.5 x	1.4 x	1.3 x
EV / EBITDA	12.3 x	9.4 x	9.5 x	10.1 x	8.1 x	7.2 x	6.6 x
EV / EBIT	16.1 x	15.5 x	13.9 x	14.4 x	11.5 x	10.1 x	9.1 x
EV / EBIT adj.*	16.0 x	12.4 x	14.3 x	14.2 x	11.3 x	10.0 x	9.0 x
P / FCF	26.8 x	17.6 x	14.7 x	23.4 x	16.4 x	14.7 x	14.0 x
P/E	22.2 x	20.2 x	20.3 x	19.8 x	15.9 x	14.2 x	12.9 x
P / E adj.*	22.0 x	16.0 x	19.8 x	19.5 x	15.7 x	14.0 x	12.7 x
Dividend Yield	3.5 %	4.6 %	3.9 %	3.8 %	4.6 %	5.2 %	5.8 %
FCF Potential Yield (on market EV)	4.7 %	5.2 %	5.3 %	5.4 %	6.8 %	7.7 %	8.6 %
*Adjustments made for: -							
Company Specific Items							
	2015	2016	2017	2018	2019e	2020e	2021e
I-f-I growth own retail	2.0 %	-5.7 %	2.8 %	4.7 %	5.0 %	5.0 %	5.0 %
share own retail in % of group sales	59.7 %	62.0 %	63.4 %	63.2 %	63.7 %	64.1 %	64.5 %



Consolidated profit and loss							
In EUR m	2015	2016	2017	2018	2019e	2020e	2021e
Sales	2,809	2,693	2,733	2,796	2,922	3,068	3,221
Change Sales yoy	9.2 %	-4.1 %	1.5 %	2.3 %	4.5 %	5.0 %	5.0 %
COGS	956	915	924	972	999	1,040	1,082
Gross profit	1,853	1,777	1,808	1,824	1,923	2,028	2,139
Gross margin	66.0 %	66.0 %	66.2 %	65.2 %	65.8 %	66.1 %	66.4 %
Research and development	65	64	63	66	70	73	75
Sales and marketing	1,141	1,242	1,187	1,190	1,234	1,287	1,343
Administration expenses	199	208	217	227	237	246	257
Other operating expenses	0	0	0	0	0	0	0
Other operating income	0	0	0	0	0	0	0
Unfrequent items	4	67	-8	4	5	5	5
EBITDA	590	433	500	487	541	592	634
Margin	21.0 %	16.1 %	18.3 %	17.4 %	18.5 %	19.3 %	19.7 %
Depreciation of fixed assets	142	169	159	146	160	170	170
EBITA	448	264	341	341	381	422	464
Amortisation of intangible assets	0	0	0	0	0	0	0
Goodwill amortisation	0	0	0	0	0	0	0
EBIT	448	264	341	341	381	422	464
Margin	15.9 %	9.8 %	12.5 %	12.2 %	13.0 %	13.7 %	14.4 %
EBIT adj.	452	330	333	345	386	427	469
Interest income	1	2	2	1	1	1	1
Interest expenses	7	4	4	5	5	5	5
Other financial income (loss)	-22	-6	-7	-6	-7	-5	-5
EBT	420	256	331	332	371	413	455
Margin	15.0 %	9.5 %	12.1 %	11.9 %	12.7 %	13.5 %	14.1 %
Total taxes	101	62	100	86	95	103	114
Net income from continuing operations	319	194	231	246	276	310	342
Income from discontinued operations (net of tax)	0	0	0	0	0	0	0
Net income before minorities	319	194	231	246	276	310	342
Minority interest	0	0	0	0	0	0	0
Net income	319	194	231	246	276	310	342
Margin	11.4 %	7.2 %	8.5 %	8.8 %	9.5 %	10.1 %	10.6 %
Number of shares, average	69	69	69	69	69	69	69
EPS	4.63	2.80	3.35	3.56	4.00	4.49	4.95
EPS adj.	4.67	3.54	3.44	3.60	4.06	4.54	5.00
*Adjustments made for:							

Guidance: 2022: around 15% EBIT margin

Financial Ratios							
	2015	2016	2017	2018	2019e	2020e	2021e
Total Operating Costs / Sales	50.0 %	56.2 %	53.7 %	53.0 %	52.8 %	52.4 %	52.0 %
Operating Leverage	0.0 x	10.0 x	19.9 x	0.1 x	2.6 x	2.1 x	2.0 x
EBITDA / Interest expenses	83.2 x	116.0 x	116.0 x	108.2 x	120.2 x	131.5 x	140.9 x
Tax rate (EBT)	23.9 %	24.2 %	30.2 %	26.0 %	25.5 %	25.0 %	25.0 %
Dividend Payout Ratio	78.2 %	92.7 %	79.0 %	75.9 %	73.6 %	73.6 %	74.6 %
Sales per Employee	204,065	195,162	195,393	195,524	200,125	204,527	214,754

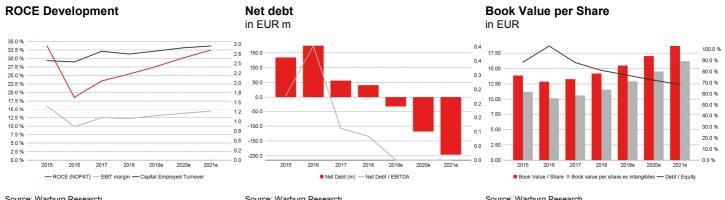


Source: Warburg Research Source: Warburg Research Source: Warburg Research



Consolidated balance sheet							
In EUR m	2015	2016	2017	2018	2019e	2020e	20216
Assets							
Goodwill and other intangible assets	183	185	183	180	177	174	17′
thereof other intangible assets	144	133	127	124	121	118	115
thereof Goodwill	39	53	56	56	56	56	56
Property, plant and equipment	440	416	366	383	416	444	472
Financial assets	22	21	18	18	18	18	18
Other long-term assets	115	125	94	94	94	94	94
Fixed assets	760	747	661	676	706	731	756
Inventories	560	568	537	531	541	552	580
Accounts receivable	240	228	208	231	234	245	258
Liquid assets	81	83	116	133	207	296	377
Other short-term assets	160	172	199	199	199	199	199
Current assets	1,040	1,051	1,059	1,094	1,180	1,292	1,413
Total Assets	1,800	1,799	1,720	1,769	1,886	2,023	2,169
Liabilities and shareholders' equity							
Subscribed capital	70	70	70	70	70	70	70
Capital reserve	0	0	0	0	0	0	(
Retained earnings	554	813	869	686	745	818	900
Other equity components	332	2	-24	221	252	285	317
Shareholders' equity	956	887	915	978	1,068	1,174	1,288
Minority interest	0	1	0	0	0	0	(
Total equity	956	887	915	978	1,068	1,174	1,288
Provisions	175	227	177	156	169	185	201
thereof provisions for pensions and similar obligations	39	46	40	42	44	46	49
Financial liabilities (total)	176	211	132	132	132	132	132
thereof short-term financial liabilities	41	77	69	69	69	69	69
Accounts payable	272	272	286	294	307	322	338
Other liabilities	221	202	210	210	210	210	210
Liabilities	844	912	805	791	818	849	881
Total liabilities and shareholders' equity	1,800	1,799	1,720	1,769	1,886	2,023	2,169

Financial Ratios							
	2015	2016	2017	2018	2019e	2020e	2021e
Efficiency of Capital Employment							
Operating Assets Turnover	2.9 x	2.9 x	3.3 x	3.3 x	3.3 x	3.3 x	3.3 x
Capital Employed Turnover	2.6 x	2.5 x	2.8 x	2.7 x	2.8 x	2.9 x	3.0 x
ROA	42.0 %	25.9 %	35.0 %	36.4 %	39.2 %	42.4 %	45.2 %
Return on Capital							
ROCE (NOPAT)	33.7 %	18.6 %	23.4 %	25.4 %	27.6 %	30.2 %	32.4 %
ROE	35.5 %	21.0 %	25.7 %	26.0 %	27.0 %	27.6 %	27.7 %
Adj. ROE	35.8 %	21.0 %	25.0 %	26.0 %	27.0 %	27.6 %	27.7 %
Balance sheet quality							
Net Debt	134	174	56	41	-31	-118	-197
Net Financial Debt	95	128	16	-1	-76	-164	-245
Net Gearing	14.1 %	19.6 %	6.1 %	4.2 %	-2.9 %	-10.0 %	-15.3 %
Net Fin. Debt / EBITDA	16.1 %	29.5 %	3.2 %	n.a.	n.a.	n.a.	n.a.
Book Value / Share	13.9	12.8	13.3	14.2	15.5	17.0	18.7
Book value per share ex intangibles	11.2	10.2	10.6	11.6	12.9	14.5	16.2

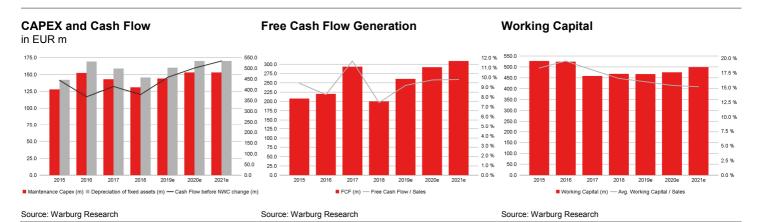


Source: Warburg Research Source: Warburg Research Source: Warburg Research



Consolidated cash flow statement							
In EUR m	2015	2016	2017	2018	2019e	2020e	20216
Net income	323	194	225	246	276	310	342
Depreciation of fixed assets	142	169	159	146	160	170	170
Amortisation of goodwill	0	0	0	0	0	0	0
Amortisation of intangible assets	0	0	0	0	0	0	0
Increase/decrease in long-term provisions	11	43	-35	-23	11	13	14
Other non-cash income and expenses	-33	-39	66	10	10	8	8
Cash Flow before NWC change	443	368	415	377	458	501	534
Increase / decrease in inventory	-23	-5	-3	6	-9	-12	-28
Increase / decrease in accounts receivable	-1	14	-13	-23	-3	-12	-12
Increase / decrease in accounts payable	39	-1	39	8	13	15	16
Increase / decrease in other working capital positions	0	0	0	0	0	0	0
Increase / decrease in working capital (total)	16	7	23	-10	1	-8	-24
Net cash provided by operating activities [1]	459	375	438	368	459	493	510
Investments in intangible assets	40	31	28	12	12	12	12
Investments in property, plant and equipment	154	121	91	148	178	183	183
Payments for acquisitions	0	0	0	0	0	0	0
Financial investments	0	0	0	0	0	0	0
Income from asset disposals	1	3	1	0	0	0	0
Net cash provided by investing activities [2]	-193	-149	-118	-160	-190	-195	-195
Change in financial liabilities	-6	31	-75	0	0	0	0
Dividends paid	-250	-250	-179	-183	-186	-203	-228
Purchase of own shares	0	0	0	0	0	0	0
Capital measures	0	0	0	0	0	0	0
Other	-34	-2	-25	-8	-8	-6	-6
Net cash provided by financing activities [3]	-290	-221	-279	-190	-194	-210	-234
Change in liquid funds [1]+[2]+[3]	-47	2	32	17	74	89	81
Effects of exchange-rate changes on cash	1	0	-7	0	0	0	0
Cash and cash equivalent at end of period	81	83	116	133	207	296	377

Financial Ratios							
	2015	2016	2017	2018	2019e	2020e	2021e
Cash Flow							
FCF	208	220	294	200	261	292	309
Free Cash Flow / Sales	9.4 %	8.3 %	11.7 %	7.4 %	9.2 %	9.7 %	9.8 %
Free Cash Flow Potential	340	213	250	264	296	330	362
Free Cash Flow / Net Profit	82.8 %	114.9 %	137.9 %	84.5 %	97.2 %	96.3 %	92.2 %
Interest Received / Avg. Cash	1.1 %	1.9 %	1.6 %	0.8 %	0.6 %	0.4 %	0.3 %
Interest Paid / Avg. Debt	4.1 %	1.9 %	2.5 %	3.4 %	3.4 %	3.4 %	3.4 %
Management of Funds							
Investment ratio	6.9 %	5.7 %	4.4 %	5.7 %	6.5 %	6.4 %	6.1 %
Maint. Capex / Sales	4.6 %	5.7 %	5.2 %	4.7 %	4.9 %	5.0 %	4.7 %
Capex / Dep	136.6 %	90.1 %	74.9 %	110.0 %	118.8 %	114.7 %	114.7 %
Avg. Working Capital / Sales	18.3 %	19.5 %	18.0 %	16.6 %	16.0 %	15.4 %	15.1 %
Trade Debtors / Trade Creditors	88.3 %	84.0 %	72.7 %	78.6 %	76.2 %	76.2 %	76.2 %
Inventory Turnover	1.7 x	1.6 x	1.7 x	1.8 x	1.8 x	1.9 x	1.9 x
Receivables collection period (days)	31	31	28	30	29	29	29
Payables payment period (days)	104	108	113	110	112	113	114
Cash conversion cycle (Days)	141	149	127	119	115	110	111





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-B-	Buy:	The price of the analysed financial instrument is expected to rise over the next 12 months.
-H-	Hold:	The price of the analysed financial instrument is expected to remain mostly flat over the next 12 months.
-S-	Sell:	The price of the analysed financial instrument is expected to fall over the next 12 months.
<b>"_"</b>	Rating suspended:	The available information currently does not permit an evaluation of the company.

Rating	Number of stocks	% of Universe
Buy	132	64
Hold	61	30
Sell	6	3
Rating suspended	7	3
Total	206	100

#### WARBURG RESEARCH GMBH - ANALYSED RESEARCH UNIVERSE BY RATING ...

... taking into account only those companies which were provided with major investment services in the last twelve months.

Rating	Number of stocks	% of Universe
Buy	30	73
Hold	9	22
Sell	0	0
Rating suspended	2	5
Total	41	100

#### PRICE AND RATING HISTORY HUGO BOSS AS OF 21.02.2019



Markings in the chart show rating changes by Warburg Research GmbH in the last 12 months. Every marking details the date and closing price on the day of the rating change.



EQUITIES			
Roland Rapelius Head of Equities	+49 40 3282-2673 rrapelius@mmwarburg.com		
RESEARCH			
Michael Heider Head of Research	+49 40 309537-280 mheider@warburg-research.com	Malte Schaumann Technology	+49 40 309537-170 mschaumann@warburg-research.com
Henner Rüschmeier Head of Research	+49 40 309537-270 hrueschmeier@warburg-research.com	Patrick Schmidt Leisure, Internet	+49 40 309537-125 pschmidt@warburg-research.com
Jonas Blum	+40 40 309537-240	Oliver Schwarz	+49 40 309537-250
Small/Mid Cap Research	jblum@warburg-research.com	Chemicals, Agriculture	oschwarz@warburg-research.com
Christian Cohrs Industrials & Transportation	+49 40 309537-175 ccohrs@warburg-research.com	Cansu Tatar Cap. Goods	+49 40 309537-248 ctatar@warburg-research.com
Felix Ellmann Software, IT	+49 40 309537-120 fellmann@warburg-research.com	Marc-René Tonn Automobiles, Car Suppliers	+49 40 309537-259 mtonn@warburg-research.com
Jörg Philipp Frey	+49 40 309537-258	Robert-Jan van der Horst	+49 40 309537-290
Retail, Consumer Goods	jfrey@warburg-research.com	Technology	rvanderhorst@warburg-research.com
Marius Fuhrberg Financial Services	+49 40 309537-185 mfuhrberg@warburg-research.com	Andreas Wolf Software, IT	+49 40 309537-140 awolf@warburg-research.com
Ulrich Huwald Health Care, Pharma	+49 40 309537-255 uhuwald@warburg-research.com		
Thilo Kleibauer	+49 40 309537-257		
Retail, Consumer Goods	tkleibauer@warburg-research.com		
Eggert Kuls Engineering	+49 40 309537-256 ekuls@warburg-research.com		
Andreas Pläsier	+49 40 309537-246		
Banks, Financial Services	aplaesier@warburg-research.com		
Franz Schall Automobiles, Car Suppliers	+40 40 309537-230 fschall@warburg-research.com		
INSTITUTIONAL EQU	JITY SALES		
Klaus Schilling	+49 40 3282-2664	Sanjay Oberoi	+49 69 5050-7410
Head of Equity Sales, Germany	kschilling@mmwarburg.com	United Kingdom, USA	soberoi@mmwarburg.com
Tim Beckmann	+49 40 3282-2665	Simon Pallhuber	+49 69 5050-7414
United Kingdom  Lyubka Bogdanova	tbeckmann@mmwarburg.com +49 69 5050-7411	Switzerland, France	spallhuber@mmwarburg.com
Ireland, Poland, Australia	lbogdanova@mmwarburg.com		
Jens Buchmüller	+49 69 5050-7415		
Scandinavia, Austria  Alexander Eschweiler	jbuchmueller@mmwarburg.com +49 40 3282-2669		
Germany	aeschweiler@mmwarburg.com		
Matthias Fritsch	+49 40 3282-2696	Julia Fesenberg	+49 69 5050-7417
United Kingdom	mfritsch@mmwarburg.com	Roadshow/Marketing  Juliane Willenbruch	jfesenberg@mmwarburg.com
Michael Kriszun United Kingdom	+49 40 3282-2695 mkriszun@mmwarburg.com	Roadshow/Marketing	+49 40 3282-2694 jwillenbruch@mmwarburg.com
SALES TRADING			
Oliver Merckel	+49 40 3282-2634	Bastian Quast	+49 40 3282-2701
Head of Sales Trading	omerckel@mmwarburg.com	Sales Trading	bquast@mmwarburg.com
Elyaz Dust Sales Trading	+49 40 3282-2702 edust@mmwarburg.com	<b>Jörg Treptow</b> Sales Trading	+49 40 3282-2658 jtreptow@mmwarburg.com
Michael Ilgenstein	+49 40 3282-2700	Jan Walter	+49 40 3282-2662
Sales Trading	milgenstein@mmwarburg.com	Sales Trading	jwalter@mmwarburg.com
MACRO RESEARCH		Du Obuletler Iee	. 10 10 0000 5 :
Carsten Klude Macro Research	+49 40 3282-2572 cklude@mmwarburg.com	Dr. Christian Jasperneite Investment Strategy	+49 40 3282-2439 cjasperneite@mmwarburg.com
Our research can be	found under:		
Warburg Research	research.mmwarburg.com/en/index.html	Thomson Reuters	www.thomsonreuters.com
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For access please conf	tact:		
Andrea Schaper	+49 40 3282-2632	Kerstin Muthig	+49 40 3282-2703
Sales Assistance	aschaper@mmwarburg.com	Sales Assistance	kmuthig@mmwarburg.com