MINERVA
Investment Management Society

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Zalando SE

Equity Research

Key Points:

Business. Zalando is one of the fastest-growing European online fashion retailers. In 2017 it recorded revenues of €4,5 billions, with an impressive 23% increase from the previous year.

The company has the right capabilities to take advantage of many trends currently going on in its market, such as mobile e-commerce, but is also facing major threats, mainly due to competition (Amazon is the most dangerous competitor). Management is still prioritizing revenue growth over profitability, and in fact the EBIT margin is around 4%.

Valuation. In order to perform an appropriate company valuation, we approached the DCF equity-side method which is not sensible to short-term market conditions that are crucial for a competitive industry as the fashion e-commerce actually is. This approach concerns the estimation of the equity value of Zalando by the sum of the present values of FCFE of the 5-years forecast and the present value of the Terminal value. We achieved the fair price for the company is not too far from the current one.

An effective support to the main FCFE valuation can be provided by the market multiples approach. By selecting companies that operate in the same markets of the target, with similar business risk and dimension, we can calculate an approximation of Zalando market value, which includes also market perceptions. This approach enables us to do additional considerations about the values obtained.

Scenario. We finally conducted a sensitivity analysis to gauge the impact of different values for the steady state growth rate and Ke on the Price value. A fair price range has been determined.

Investment risk. Zalando's performance has recently been volatile and the company appears to be experiencing a negative tendency in the results, at least in the short term. Rising competition is indeed a challenge in the long run. Other risks include the ones deriving from technology innovation and the regulatory environment.

Zalando SE (ZAL.DE)
XETRA – P **27,40**, Currency in EUR

Price Target: 33,42 (↑ xx)

WHAT'S INSIDE	
☐ Business description	☑ FCFE approach
☐ Financial analysis	☑ Multiples approach
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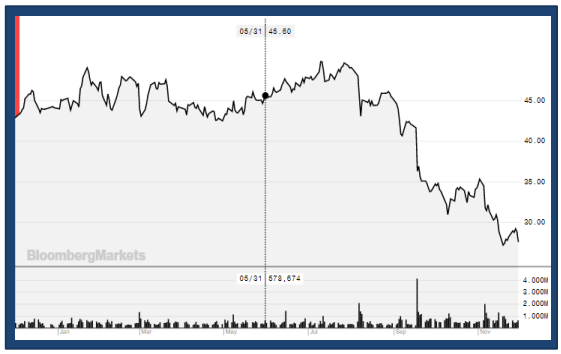


Key Statistics

Sector	Cons. Cyclical
Industry	Specialty Retail
Full Time Employees	15,455
Volume (30day avg)	650,2k
Market Cap	7,29B

Earnings History

	12/31/2017	3/31/2018	6/30/2018	9/30/2018
EPS Est.	0,31	0,01	0,24	-0,13
EPS Actual	0,28	-0,06	0,2	-0,17
Difference	-0,03	-0,07	-0,04	-0,04
Surprise %	-9,7%	-700%	-16,7%	-30,8%

Recommendation: NEUTRAL

Zalando is definitely not a bad investment for your portfolio, mainly thanks to its financial soundness and encouraging growth expectations. On top of that, a new investor would probably consider this an intriguing entry point as the stock has just bottomed out of its 2-years lowest. However, the results of the company have been volatile and often below the analysts' anticipations. Our target price does not justify an overweight in the position, and, if the recent negative trend persists, we doubt that the stock will provide extra returns relative to the market.

Business description

1. Company background

Zalando was founded in 2008 in Berlin under the name Ifansho and is currently Europe's leading online fashion platform. It was initially focused on shoes (taking inspiration from Zappos.com, the US online retailer), but in 2010 it started selling clothing products in general. In 2009 operations in Austria started. In 2010 the company expanded in the Netherlands and in France, and launched the first private label (part of the zLabels umbrella).

In 2011 it was the turn of UK, Italy and Switzerland. In 2012 Sweden, Denmark, Finland, Norway, Belgium, Spain and Poland followed, and in Germany the first smartphone app was launched. The international apps were launched in 2014, the same year during which the company went public. In 2015 the same-day delivery pilot service was launched in Berlin, and the packages-return collecting pilot started in London. In 2017 sales reached €3.6bn, and mobile users represented more than 50% of purchases. The membership program "Zalando Plus" was introduced in December.

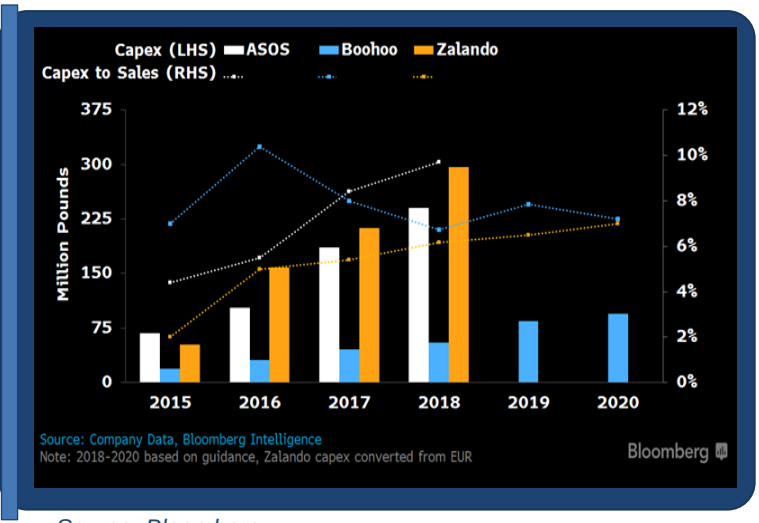
Finally, as for 2018, important milestones were the introduction of the Beauty category of the website and the expansion in Czech Republic and Ireland. Among the current shareholders, there are still the two co-founders and co-CEOs Robert Gentz and David Schneider. Institutional investors such as Allianz, T. Rowe Price and Vanguard hold a stake of about 3% each.

2. Strategic analysis

European **online fashion sales** in 2017 were about €55,6 bln, 13% of the overall fashion retail market [Source: Euromonitor, Annual Report 2017]. The overall market is more or less stable, while this sub-segment has grown at a 12% CAGR over the past 5 years. Since familiarity with digital technology will probably keep on rising thanks to younger customers, this trend is forecasted to go on (9,7% growth rate in 2018 in Europe for online fashion, compared to only 0,8% of the overall fashion industry).

Zalando can continue to **ride the wave of the growth of the European online fashion market** since it covers 17 countries, it has fast and convenient delivery and return policies and it has a very user-friendly and engaging platform. Moreover, its assortment is wide (about 2000 brands), personalized and constantly expanding.

Mobile commerce is another great opportunity: revenues generated through mobile devices in Europe were €85.56 billions in 2017 and they are forecasted to grow at a 13% CAGR over the next years (source: Annual Report 2017, page 119). Zalando's mobile visit share was 80% as of Q3 2018, so the company is well-positioned in this sense.



Source: Bloomberg

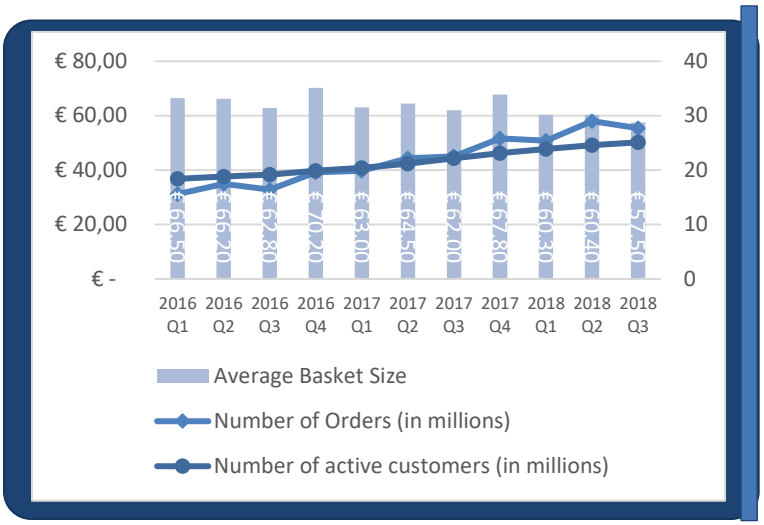
Zalando spends about 3 times more than it close competitor Asos in marketing, and is **investing heavily** in fulfilment infrastructure and technology. 77% of the €244 milion CAPEX of 2017 regarded PP&E (Property, Plant & Equipment) (source: Capital Markets Day Presentation, June 2018). The 2017 CAPEX to sales ratio has been similar also for the other two online-only companies (and close competitors) Asos and Boohoo, as the image shows.

These investments should have **positive effects on both revenues** (customers and average spending should increase since delivery will be faster and more efficient; the platform will be more attractive) and **costs** (higher route density thanks to more warehouses and higher units sold per order thanks to a more personalized assortment lead to a **lower average shipping cost per customer**).

Management continues to believe that **revenue growth is the main objective** (and not profitability). Such growth depends mainly on the number of active customers, average order size and the number of orders, which are shown in the graph below (source: Zalando).

In order to increase customer satisfaction, it is trying to implement a **same-day delivery service**: a survey by KPMG shows that millennials are very sensitive to delivery and return speed. The faster the shipment, the more they are willing to buy online.

Zalando also benefits of network effects: it has 25,1 million active customers (around 6% of the population in markets where it has a presence), and such a reach makes it very attractive for branded partners and in particular for smaller brands.



The **partner program** allows brands to have full control of inventories and prices, so that premium brands reduce the risk of seeing their products being discounted excessively. Moreover, in this way the company picks the products directly from partners' inventory and does not take on more inventory risk, while expanding the product range.

The company is also investing in the development of **predictive algorithms** which exploit the enormous amounts of data provided by website visitors. Such algorithms permit better sales conversion rates and are not easily imitable by competitors (at least in the short term), and represent a competitive advantage.

Another competitive advantage, according to the management, is its **local alignment**. Fashion styles, payment methods, and delivery options are very different across the different countries, and Zalando claims that "No other online fashion retailer understands the particularities of all European markets" as well as itself (source: Annual Report 2017, page 121).

Amazon is a major threat, since it is already well-known by many customers, owns very efficient algorithms and logistic networks and has an enormous customer base. However, it does not match Zalando in terms of fashion assortment curation. To put it in the words of Rubin Ritter, Zalando's co-chief executive: "The Amazon model is — you can get everything, and get it cheaply and conveniently. But it's very transactional. It's not the best proposition for fashion." (source: Financial Times, "Zalando updates its look as it prepares for a new push by Amazon", May 28 2017).

Appropriateness of brand representation, and internal competition from third-party merchants might disincetivize brands from trusting Amazon. Finally, 68% of Zalando's customers see a clear advantage over other online stores and 89% perceive the return process as easy and simple [Source: Customer Survey 2016, website], and therefore we believe that the company has a stronger reputation in fashion consumers' minds compared to the US giant.

The **bargaining power with brands is high** thanks to the impressive reach and penetration (6% of the European population).

As for the online fashion industry, it is **fragmented and competitive**. Firms constantly invest (especially in technology and in logistics), but they are almost price-takers because of competition and **price consciousness of consumers**.

There is also the possibility of such as, for example, Instagram, which might exploit its strong relationships with brands and influencers to enter the online fashion retail market. To summarize, here is a SWOT analysis table**:**

STRENGTHS	WEAKNESSES
• Large customer base, wide brand awareness, more than 2000 brands • Same-day delivery and instant returns • Partnership program with brands • AI and machine learning provide personalisation to customers ("*smart data*")	• Profitability is still low, also compared to peers • High CAPEX that lower cash flows • Aggressive return policies increase costs • Less revenue from own labels compared to peers
OPPORTUNITIES	**THREATS**
• Rampant growth of the European online retail industry • Mobile usage	• Amazon's expansion in fashion • Instagram's potential's entrance in the market

Financial analysis

1. Reclassified annual statements

Balance Sheet	2013	2014	2015	2016	2017	
Total assets	**1.071,7**	**1.785,5**	**2.116,5**	**2.538,2**	**2.980,4**	**100,00%**
Current assets	**895,6**	**1.591,5**	**1.863,5**	**2.145,5**	**2.410,7**	**80,89%**
Inventories	332,5	348,3	493,5	576,9	778,9	26,13%
Prepayments	0,7	0,9	1,5	1,1	2,6	0,09%
Trade and other receivables	87,2	140,1	149,7	216,0	278,7	9,35%
Account receivables	139,3	203,4	282,6	287,7	344,1	11,55%
Doubtful accounts	52,1	63,3	132,9	71,7	65,4	2,19%
Other financial assets	13,5	13,6	175,9	245,8	80,7	2,71%
Term deposits	0,0	0,0	155,0	220,0	40,0	1,34%
Derivative financial instruments	0,0	0,0	3,8	8,9	20,7	0,69%
Receivables from suppliers	0,0	0,0	0,0	5,0	14,5	0,49%
Other financial instruments	13,5	13,6	17,1	11,9	5,5	0,18%
Other non-financial assets	44,5	37,6	66,7	133,1	152,7	5,12%
VAT receivables	16,4	5,5	21,0	59,6	67,4	2,26%
Right to repossess goods	18,7	24,6	34,5	46,7	62,5	2,10%
Deferred items	6,2	4,8	4,9	13,5	13,0	0,44%
Other assets	3,2	2,7	6,3	13,3	9,8	0,33%
Cash and cash equivalents	417,2	1.051,0	976,2	972,6	1.065,5	35,75%
Money market funds	-	520,0	439,7	477,9	475,5	15,95%
Cash in bank	-	340,0	391,5	439,6	529,8	17,78%
Short-term bank deposits	-	190,0	145,0	55,0	60,0	2,01%
Cash on hand	-	1,0	0,0	0,1	0,2	0,01%
Assets held for sale	0,0	0,0	0,0	0,0	51,6	1,73%
Non current assets	**176,1**	**194,0**	**253,0**	**392,7**	**569,7**	**19,11%**
Intangible assets	21,3	29,0	48,8	100,9	182,3	6,12%
Capitalized development costs	11,9	19,7	23,1	31,1	42,6	1,43%
Industrial rights, licenses	8,0	6,7	15,9	17,5	30,5	1,02%
Goodwill	0,0	0,0	0,0	13,9	50,4	1,69%
Assets under development	1,4	2,6	9,8	38,4	58,8	1,97%
Property, plant, equipment	105,7	111,0	128,2	243,0	350,5	11,76%
Plant and machinery	21,3	67,9	84,8	112,2	174,5	5,85%
Other equipment and furniture	37,9	42,0	30,2	42,3	59,0	1,98%
Land and buildings	0,0	0,0	0,5	4,2	0,9	0,03%
Assets under construction	0,0	0,0	12,7	84,3	116,1	3,90%
Prepayments	46,5	1,1	0,0	0,0	0,0	0,00%
Financial assets	48,1	49,4	17,6	29,2	25,9	0,87%
Derivative financial instruments	0,0	0,0	2,0	11,2	17,2	0,58%
Restricted cash	47,4	48,3	13,0	12,9	2,5	0,08%
Other assets	0,7	1,1	2,6	5,1	6,2	0,21%
Deferred tax assets	1,0	0,9	47,5	1,7	1,5	0,05%
Non-financial assets	0,0	3,7	3,5	3,0	3,5	0,12%
Investments accounted	0,0	0,0	7,4	14,9	6,0	0,20%
Total liabilities and equity	**1.071,7**	**1.785,5**	**2.116,5**	**2.538,2**	**2.980,4**	**100,00%**
Current liabilities	**496,0**	**627,9**	**813,8**	**1.098,2**	**1.369,5**	**45,95%**
Provisions	0,0	0,5	0,0	1,7	0,3	0,01%
Borrowings	3,2	3,2	3,2	3,2	2,8	0,09%
Trade payables	410,0	492,1	645,8	920,5	1.120,0	37,58%
Prepayments received	7,4	6,7	8,6	8,1	32,0	1,07%
Income tax liabilities	0,1	6,1	18,2	8,9	6,4	0,21%
Other financial liabilities	34,9	61,9	71,8	69,0	84,0	2,82%
Other non-financial liabilities	40,4	57,4	66,2	86,8	124,0	4,16%
Non current liabilities	**29,2**	**30,9**	**31,3**	**32,5**	**72,0**	**2,42%**
Provisions	4,8	5,8	9,1	12,6	15,8	0,53%
Government grants	1,4	3,0	1,8	0,0	0,0	0,00%
Borrowings	17,0	17,6	14,4	11,2	8,4	0,28%
Other financial liabilities	2,9	0,6	2,1	2,3	4,5	0,15%
Other non-financial liabilities	3,1	1,3	3,1	3,3	7,9	0,27%
Deferred tax liabilities	0,0	2,6	0,8	3,1	35,4	1,19%
Equity	**546,5**	**1.126,7**	**1.271,4**	**1.407,5**	**1.538,9**	**51,63%**
Equity of shareholders	546,5	1.126,7	1.271,4	1.407,5	1.539,0	51,64%
Issued capital	0,1	244,8	247,0	247,2	247,2	8,29%
Capital reserves	833,3	1.120,4	1.140,9	1.161,0	1.182,4	39,67%
Other reserves	-0,3	1,0	1,5	-3,2	8,7	0,29%
Accumulated profit	-286,6	-239,5	-118,0	2,5	100,7	3,38%
Non-controlling interest	0,0	0,0	0,0	0,0	-0,1	0,00%

Income Statement	2013	2014	2015	2016	2017	
Revenue	**1.762,0**	**2.214,0**	**2.958,1**	**3.639,0**	**4.489,0**	**100,00%**
Sale of merchandise	1.742,5	2.190,7	2.923,0	3.553,1	4.358,9	97,10%
Other services	19,5	23,3	35,1	85,9	130,1	2,90%
Cost of sales	**1.047,0**	**1.255,3**	**1.624,0**	**2.029,6**	**2.529,6**	**56,35%**
Cost of materials	979,9	1.126,5	1.467,4	1.823,4	2.250,9	50,14%
Other costs	67,1	128,8	156,6	206,2	278,7	6,21%
Gross profit	**715,0**	**958,7**	**1.334,1**	**1.609,4**	**1.959,4**	**43,65%**
Selling and distribution costs	733,5	793,8	1.118,9	1.223,7	1.530,8	34,10%
Fulfillment costs	424,0	498,2	767,0	847,8	1.168,2	26,02%
Marketing costs	309,5	295,6	351,9	375,9	326,5	7,27%
Other costs	0,0	0,0	0,0	0,0	36,1	0,80%
Administrative expenses	105,1	109,2	129,0	191,3	242,9	5,41%
Other operating income	12,5	12,2	10,4	16,7	11,8	0,26%
Other operating expenses	2,9	5,8	7,0	4,1	9,9	0,22%
Earnings before interest and taxes (EBIT)	**-114,0**	**62,1**	**89,6**	**207,0**	**187,6**	**4,18%**
Financial result	-3,3	-4,5	-3,0	-14,1	-12,4	0,28%
Interest and similar income	0,4	0,2	1,2	2,1	3,9	0,09%
Interest and similar expenses	2,9	4,6	6,1	11,8	14,5	0,32%
Investments accounted	0,0	0,0	-1,6	-3,6	0,3	0,01%
Other financial result	-0,8	-0,1	3,5	-0,8	-2,1	0,05%
Earnings before taxes (EBT)	**-117,3**	**57,6**	**86,6**	**192,9**	**175,2**	**3,90%**
Income taxes	-0,7	10,5	-34,9	72,4	73,6	1,64%
Net income for the period	**-116,6**	**47,1**	**121,5**	**120,5**	**101,6**	**2,26%**

2. Forecasts

Balance sheet	2017	2018E	2019E	2020E	2021E	2022E
Total assets	**2.980**	**3.326**	**3.942**	**4.779**	**5.885**	**7.306**
Current assets	**2.411**	**2.626**	**3.064**	**3.681**	**4.511**	**5.586**
Inventories	779	958	1.200	1.501	1.878	2.351
Prepayments	3	3	4	5	6	8
Trade and other receivables	279	343	430	537	672	841
Account receivables	344	423	530	663	830	1.039
Doubtful accounts	65	80	101	126	158	197
Other financial assets	81	99	124	156	195	244
Term deposits	40	49	62	77	96	121
Derivative financial instruments	21	25	32	40	50	62
Receivables from suppliers	15	18	22	28	35	44
Other financial instruments	6	7	8	11	13	17
Other non-financial assets	153	188	235	294	368	461
VAT receivables	67	83	104	130	162	203
Right to repossess goods	63	77	96	120	151	189
Deferred items	13	16	20	25	31	39
Other assets	10	12	15	19	24	30
Cash and cash equivalents	1.066	983	1.019	1.136	1.341	1.630
Money market funds	476	439	455	507	598	728
Cash in bank	530	489	507	565	667	811
Short-term bank deposits	60	55	57	64	76	92
Cash on hand	0	0	0	0	0	0
Assets held for sale	52	52	52	52	52	52
Non current assets	**570**	**701**	**878**	**1.098**	**1.373**	**1.719**
Intangible assets	182	183	184	185	185	186
Capitalized development costs	43	43	44	46	48	50
Industrial rights, licenses	31	31	32	33	34	36
Goodwill	50	51	53	55	57	59
Assets under development	59	59	61	64	66	69
Property, plant, equipment	351	352	366	379	394	409
Plant and machinery	175	175	182	189	196	203
Other equipment and furniture	59	59	62	64	66	69
Land and buildings	1	1	1	1	1	1
Assets under construction	116	117	121	126	130	135
Prepayments	0	0	0	0	0	0
Financial assets	26	32	39	48	59	73
Derivative financial instruments	17	21	26	32	39	48
Restricted cash	3	3	4	5	6	7
Other assets	6	8	9	12	14	17
Deferred tax assets	2	2	2	3	3	4
Non-financial assets	4	4	5	7	8	10
Investments accounted	6	7	9	11	14	17
Total liabilities and equity	**2.980**	**3.326**	**3.942**	**4.779**	**5.885**	**7.306**

Current liabilities	**1.370**	**1.684**	**2.111**	**2.640**	**3.302**	**4.133**
Provisions	0	0	0	1	1	1
Borrowings	3	3	4	5	7	8
Trade payables	1.120	1.377	1.726	2.159	2.700	3.380
Prepayments received	32	39	49	62	77	97
Income tax liabilities	6	8	10	12	15	19
Other financial liabilities	84	103	129	162	203	254
Other non-financial liabilities	124	153	191	239	299	374
Non current liabilities	**72**	**89**	**111**	**139**	**174**	**217**
Provisions	16	19	24	30	38	48
Government grants	0	0	0	0	0	0
Borrowings	8	10	13	16	20	25
Other financial liabilities	5	6	7	9	11	14
Other non-financial liabilities	8	10	12	15	19	24
Deferred tax liabilities	35	44	55	68	85	107
Equity	**1.539**	**1.553**	**1.720**	**2.001**	**2.409**	**2.955**
Equity of shareholders	1.539	1.553	1.720	2.001	2.409	2.955
Issued capital	247	264	439	700	1.076	1.606
Capital reserves	1.182	1.268	1.360	1.459	1.564	1.678
Other reserves	9	6	8	9	10	9
Accumulated profit	101	71	90	107	114	101
Non-controlling interest	0	0	0	0	0	0

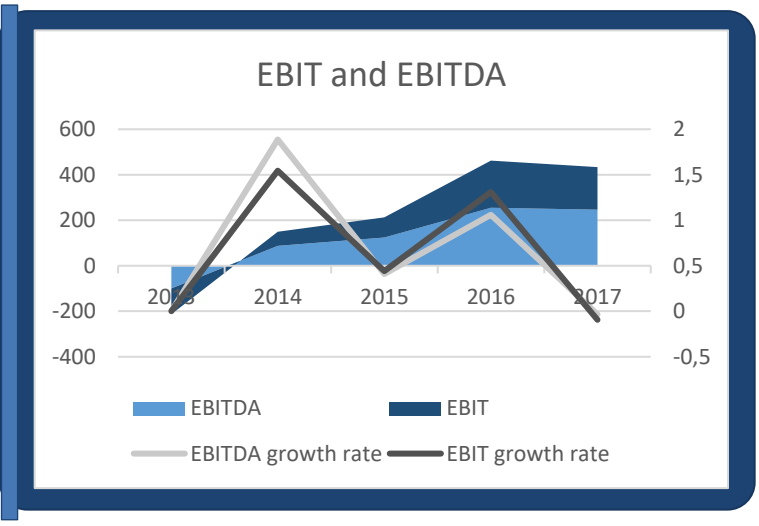
Income statement		2017	2018E	2019E	2020E	2021E	2022E
Revenue		**4.489**	**5.521**	**6.919**	**8.653**	**10.822**	**13.548**
	Sale of merchandise	4.359	5.361	6.718	8.402	10.509	13.156
	Other services	130	160	201	251	314	393
Cost of sales		**2.530**	**3.183**	**3.947**	**4.884**	**6.044**	**7.487**
	Cost of materials	2.251	2.832	3.512	4.346	5.378	6.662
	Other costs	279	351	435	538	666	825
Gross profit		**1.959**	**2.338**	**2.972**	**3.769**	**4.778**	**6.062**
Selling and distribution costs		1.531	1.958	2.550	3.308	4.292	5.580
Administrative expenses		243	282	293	304	315	327
Other operating income		12	18	18	19	20	21
Other operating expenses		10	6	8	11	14	18
Earnings before interest and taxes (EBIT)		**187**	**110**	**139**	**165**	**177**	**158**
Financial result		-12	-8	-10	-12	-13	-12
Earnings before taxes (EBT)		**175**	**102**	**129**	**154**	**164**	**146**
Income taxes		74	31	39	47	50	45
Net income for the period		**101**	**71**	**90**	**107**	**114**	**101**

Cash flow	2013	2014	2015	2016	2017	2018E	2019E	2020E	2021E	2022E
EBIT	-114	62	90	207	188	110	139	165	177	158
Net interest	-3	-5	-3	-14	-12	-8	-10	-12	-13	-12
Depreciation and Amortization	15	26	34	48	59	88	114	148	193	250
as % of sales	0,8%	1,2%	1,2%	1,3%	1,3%	1,6%	1,7%	1,7%	1,8%	1,8%
as % of Capex	20,2%	50,6%	57,0%	26,5%	24,1%	35,9%	45,0%	56,2%	70,3%	88,0%
Other non-cash costs	2	20	15	21	34	54	70	91	117	153
Tax paid	0	0	0	-34	-49	-47	-47	-47	-47	-47
Working capital	10	-4	-3	-128	-62	-77	-96	-120	-150	-188
Change in Working capital	-7	13	-1	125	-65	14	19	24	30	38
Cash flow from operations	**-107**	**116**	**134**	**353**	**153**	**211**	**286**	**370**	**457**	**540**
CAPEX	-74	-51	-60	-182	-244	-245	-255	-264	-274	-284
change	-	-30,9%	17,6%	202,8%	34,2%	0,4%	3,9%	3,7%	3,7%	3,8%
as % of sales	4,2%	2,3%	2,0%	5,0%	5,4%	4,4%	3,7%	3,1%	2,5%	2,1%
Free cash flow to the firm	**-181**	**65**	**74**	**172**	**-91**	**-34**	**31**	**105**	**183**	**255**
Acquisitions and disposals	0	0	-17	-30	-35	-6	-8	-10	-13	-16
Other investment/outflows	-16	-1	-120	-65	190	23	30	39	50	65
Cash flow from investments	**-90**	**-52**	**-197**	**-277**	**-88**	**-228**	**-232**	**-235**	**-236**	**-236**
Increase/decrease in debt position	6	1	-3	-3	-8	3	3	4	5	7
Buybacks and equity issuance	199	510	5	0	-3	-68	-21	-21	-21	-21
Cash flow from financing	**205**	**511**	**2**	**-3**	**-11**	**-66**	**-18**	**-17**	**-16**	**-15**
Changes in net cash/debt	**8**	**575**	**-61**	**74**	**54**	**-83**	**36**	**117**	**205**	**289**
Free cash flow to equity	**-175**	**66**	**71**	**169**	**-98**	**-31**	**35**	**110**	**189**	**262**

3. Financial ratios

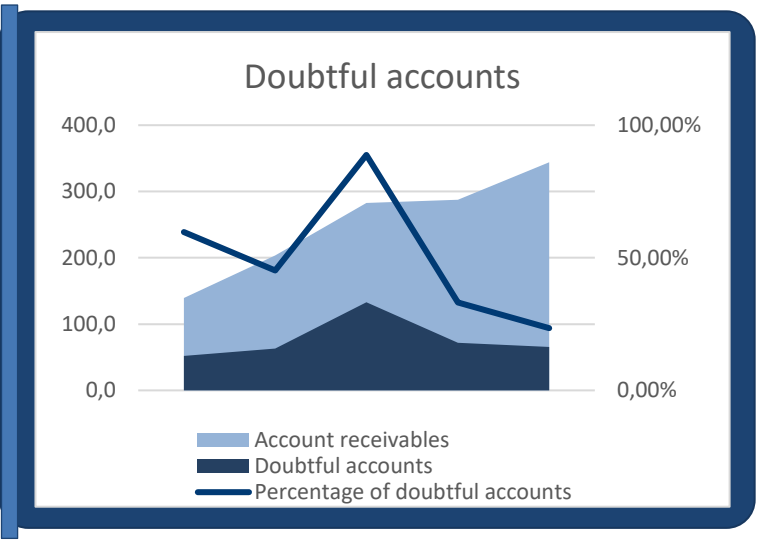
Performance indicators	2013	2014	2015	2016	2017
EBITDA	-99,1	87,9	123,8	255,2	246,3
EBIT	-114	62,1	89,6	207	187,6
Percentage of doubtful accounts	59,75%	45,18%	88,78%	33,19%	23,47%
Fulfillment cost ratio	24,06%	22,50%	25,93%	23,30%	26,02%
Marketing cost ratio	17,57%	13,35%	11,90%	10,33%	7,27%
Number of orders	35,1	41,4	55,3	69,2	90,5
Active customers	13,1	14,7	17,9	19,9	23,1

Development ratios	2013	2014	2015	2016	2017
Revenue growth rate	-	25,65%	33,61%	23,02%	23,36%
Cost of materials growth rate	-	14,96%	30,26%	24,26%	23,45%
EBITDA growth rate	-	188,70%	40,84%	106,14%	-3,49%
EBIT growth rate	-	154,47%	44,28%	131,03%	-9,37%
Net income growth rate	-	140,39%	157,96%	-0,82%	-15,68%
Total assets growth rate	-	66,60%	18,54%	19,92%	17,42%
Total equity growth rate	-	106,17%	12,84%	10,70%	9,34%



Zalando displays the worst financial results in the first year analyzed: in 2013, both **EBIT** and **EBITDA** were negative. Not surprisingly, after this hard year for the firm, the growth rate experienced between 2013 and 2014 were the largest of the period. The growth has been positive after that, with the exception of the last year. In 2017 the two measures are still positive, but started a decreasing trend that we think will continue at least for the first forecasted year.

During the period, the revenue and cost of materials increased at almost the same rate. However, the negative financial results and the other cost elements in the income statement led to a pronounced **decrease in the net income**.



Two other interesting performance indicators are the **fulfillment cost ratio** and the **percentage of doubtful accounts**. It is clear that a relevant cost account for this kind of business is the **fulfillment cost**, related to taking an order, executing and making it ready for delivery to the intended customer. Fulfillment costs have been strongly rising over the period, as Zalando is building up a diverse logistic network. In 2016, those costs increased also because of the higher volumes of external fraud, coming from the more customer-friendly methods of payment available.

This last consideration leads us to the next indicator: as we can see, quite a large part of the account receivables is made up of "**bad debt**". This risk will be brought up again in the last section. Zalando managed to reduce the bad debt allowances by better monitoring fraudulent activities.

Liquidity ratios	2013	2014	2015	2016	2017
Quick Ratio	1,14	1,98	1,68	1,43	1,19
Current Ratio	1,81	2,53	2,29	1,95	1,76
Net Working Capital	399,6	963,6	1049,7	1047,3	1041,2
Days Sales Outstanding	18	23	19	22	23
Days Payable Outstanding	143	143	145	166	162
Days Inventory Outstanding	64	59	63	61	66
Cash Conversion Cycle	-60	-61	-64	-82	-72

Liquidity ratios are useful to assess the cash levels of a company and its ability to turn assets into cash to pay off liabilities. The **current ratio** relates the current assets to the current liabilities; the rule of thumb for this ratio is a value around 2, which is consistent with the ones ranging from 1,76 to 2,53 calculated for Zalando. The same indication is given by the **quick ratio**, which keeps out the less liquid assets (inventories) from the previous calculation. Again, the value above one is a good clue that the firm should not incur in a liquidity crisis. A similar event is definitely unlikely considering the large cash component (35,75% of total assets) in the balance sheet. Finally, the **net working capital** appears to be large and positive in the last years and the company benefits from a negative **cash conversion cycle**.

Solvency Ratios	2013	2014	2015	2016	2017
Liabilities/Equity	0,961	0,585	0,665	0,803	0,937
Debt/Equity	0,106	0,074	0,072	0,061	0,065
Equity Ratio	0,510	0,631	0,601	0,555	0,516
Net Debt to Equity	-0,657	-0,859	-0,696	-0,630	-0,628
Interest Coverage Ratio	-39,310	13,500	14,689	17,542	12,938

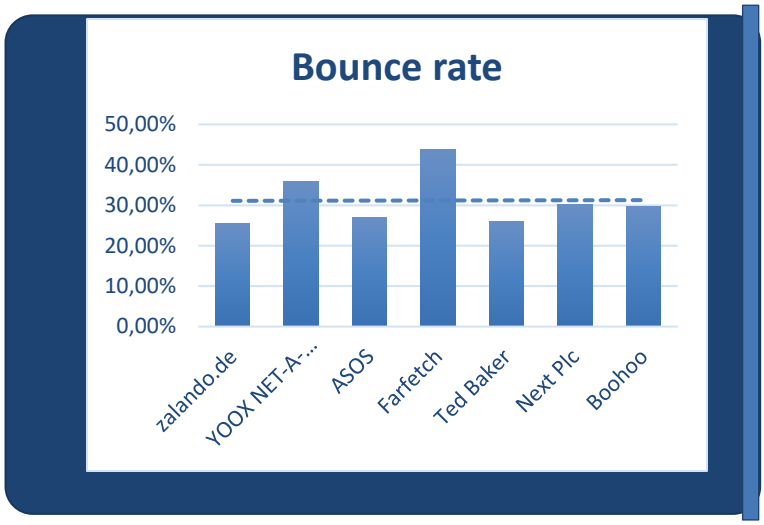
Solvency ratios focus on the long-term sustainability of a company: better solvency ratios indicate a more financially sound firm. The **equity ratio** measures the amount of assets financed by the owners of the company and higher ratios are favorable because it shows potential creditors that the company is worth investing and not risky. This is the case of Zalando, with a healthy ratio higher than 0,5 in the whole period. The proportion between liabilities and equity is close to one, showing a **well-balanced** liability side of the statement. Furthermore, the **net debt to equity ratio** is negative as the cash holdings are higher than the financial liabilities. Overall Zalando appears to be sound and not burdened by debt: the financial liabilities are relative small and the EBIT extensively covers interests.

Profitability ratios	2013	2014	2015	2016	2017
Gross Margin	40,58%	43,30%	45,10%	44,23%	43,65%
EBITDA Margin	-5,62%	3,97%	4,19%	7,01%	5,49%
Return on Equity	-21,34%	4,18%	9,56%	8,56%	6,60%
Return on Investments	-10,64%	3,48%	4,23%	8,16%	6,29%
Operating Income/Sales	-0,065	0,028	0,031	0,058	0,043
Sales/Assets	1,626	1,227	1,381	1,400	1,463

Profitability ratios show a company's ability to generate profits from its operations and thus are useful to evaluate the remuneration of shareholders. Both the **return on equity** and the **return on investments** were negative in 2013 because of the losses registered at the end of that year, but they followed a positive and similar pattern from 2013 to 2014. The return on investment was mostly determined by the **turnover ratio** (sales/assets) while the **return on sales** (operating income/sales) has been quite low. In line with the reduction in the net income, the value of both ratios decreased in 2017 after peaking between 2015 and 2016. In our forecasts, this trend will continue over the next couple of years.

E-commerce metrics are analyzed in order to achieve a deeper knowledge of Zalando, its peers and the target market

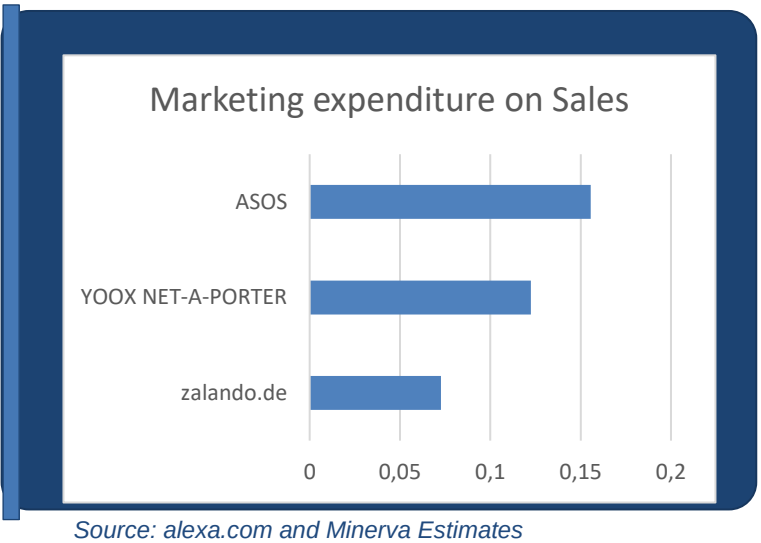
itself. As we forecasted a positive growth rate in terms of revenue for 2018, the bounce rate shows how zalando.de, the main e-commerce of Zalando, is overperforming among its peers. It has a 25,40% bounce rate, which means that over 74% of visitors do not quit their session without visiting more than a page or just without having any interaction with the shopping bag. That is a way head of Yoox-Net-A-Porter (36%), the new global player, even better than Farfetch (43%) that has hired all people that disliked the merger between Yoox and NAP. Therefore, regarding to the peers we chose in our relative valuation, ASOS and Ted Baker seem to reach the same performance (respectively 27% and 26%). Instead, Boohoo and Next Plc are more close to the group mean.



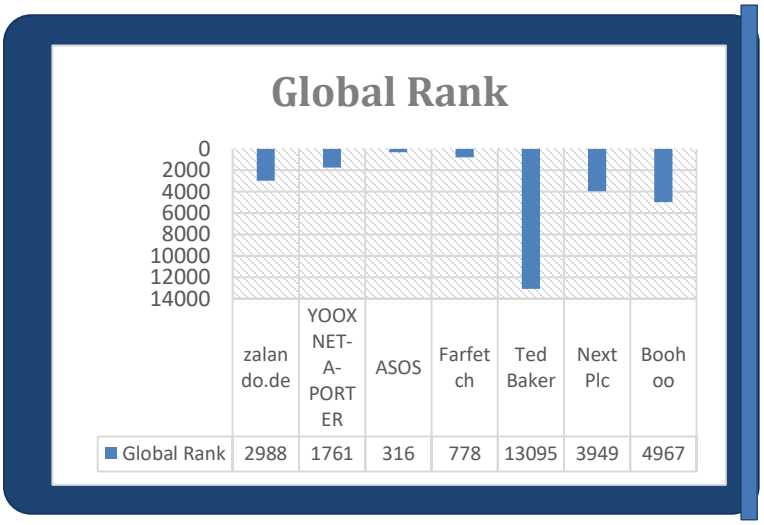
Source: alexa.com

This index can be a useful proxy of how an e-commerce can convert the views and the clicks into revenues. Given this fact, we proceed analyzing the marketing expenditure on sales, which could be useful to understand how high the acquisition cost per customer is.

The chart underlines the fact that Zalando (only 7%) is way far from ASOS (15,6%) and in part Yoox-NAP (12,4%), that have a more aggressive expenditure in order to gain an important client base. Zalando has to pay attention to its costs structure and to maintain its effectiveness. In this case, margins are more important than marketing metrics. This explains the fact that zalando.de is not over performing in terms of Global website rank produced by alexa.com, in which we can observe that ASOS has the top position, followed by Yoox-NAP and only after those two we have Zalando. Nevertheless, we should also consider that Zalando revenues are almost twice bigger than these two important players and we should consider Asos as the strongest direct competitor, as it has the same market target and almost the same Average Basket Value (around €70). On the other hand, Yoox-NAP is the first luxury e-commerce player with an Average Basket Value of more than €300 in 2017.



Source: alexa.com and Minerva Estimates



	zalando.de	YOOX NET-A-PORTER	ASOS	Farfetch	Ted Baker	Next Plc	Boohoo
Global Rank	2988	1761	316	778	13095	3949	4967

Valuation

1. Free Cash Flow to Equity approach

Reasons for caution. As stated in the last quarterly statement, the unusual hot summer period together with the delayed switch to the fall/winter season weigh heavily on **revenue growth** and **adjusted EBIT** of the company. During this third quarter, Zalando revised downwards its target growth corridor, expecting now revenue growth at about the low end of 20 percent to 25 percent target and similarly adjusted EBIT of EUR 95m to EUR 135m (previously, this target range was the low end of EUR 165m to EUR 215m). This is a clear evidence of extreme volatility of its own business, the reason why, to this day, a sluggish growth of the company is highly likely.

In the quarterly report, the company itself officially disclosed that revenue growth was behind its ambitions, despite revenue showed a rise of 18,1 percent and a GMV increase by 16 percent compared to the corresponding prior-year period. Conversely, the corresponding increase in selling and distribution costs (+19,7 percent relative to the third quarter of 2017) cannot be neglected in forecasting future operating cash flows. In addition to that, the market environment has proved its high sensitivity to price fluctuations and generally to dynamics of the Eurozone; and this last point is highly significant, especially considering that Zalando focuses only on the European market.

It seems quite fair to assume that this unusual year will not take the sales growth to a different level, if compared with the previous ones: this is the reason why we adjusted our forecasts taking into account the trend of the last Q3 2018 with respect of the Q3 2017. Specifically, this adjustment concerned the forecasts for the current year. This allowed to capture the unexpected result of the last exercise; the compound annual growth rate relative to revenue and cost of sales was used as a measure of growth in subsequent periods; lastly, further adjustments for the **inflation** and the **real GDP growth rate** with respect to the Eurozone (source: IMF databank.com) have been considered (for further details, please see Appendix, Table 1).

Short-term volatility. As a natural consequence of a **rapidly evolving business model**, the trading price of the company fluctuates significantly in the short-term in response to changes in interest rates, trends in the industry segments, variations in operating results, general fluctuations in the stock market and in market prices for e-commerce companies, finally changes in financial estimates by securities analysts or in capital structure, including issuance of additional debt or equity to the public. The current stock price is not too far from all-time low (specifically, if compared to the maximum of EUR 49,74 in July 2018) and it seems to follow a decreasing trend. There are two ways of thinking about this *dilemma*: the actual scenario could signal a reversal of the current negative trend or, more likely, a forthcoming red flag. Undoubtedly, this is another reason for **remaining cautious** and **vigilant** on this matter.

Capex will remain sustainable. The company stated that Capital expenditure will stay on elevated levels in 2018, but we do not expect high expenditure levels, at least no more than EUR 300m - 350m for the coming years. The last company report appears to be sufficiently clear about that, Zalando is further optimizing its logistics footprint and projects that will be spread over a longer period of time. We do not expect, therefore, an excessively high growth period. It is reasonable to suppose that revenue growth will be consistent with economic growth, considering also the high flexibility of e-commerce business in response to macroeconomic indicators. Despite the capital expenditure will absorb a large part of operating cash flows, our view of balanced growth allowed free cash flow to stay consistently positive in the valuation period.

Long-term growth can turn things around. According to recent market outlooks (please check the paper "Global Cross-Border B2C E-Commerce 2018"), e-commerce sales will account for one-fifth of overall online retail sales volume by 2022. This is driven by the rising number of online shoppers making purchases on foreign websites. As stated in the last quarterly report, in fact, the increase in revenue of Zalando was determined by a **larger customer base** as well as by an increase in **average revenue per active customer**. We expect this trend will drive the growth path of the company in the coming years. Therefore, given the flexibility of the market and in light of the considerations above, a

potential non-negligible long-term growth may be determined by the market growth.

In order to anchor the long-term growth to the market growth, we providentially exploited the digital market outlook for e-commerce in Europe, specifically to the fashion sector (the core segment of Zalando). It goes without saying that the choice of such measurement heavily determines the outcome of this valuation and this was pointed out in a specific section of this report (please check the section "Scenario Analysis").

Methodology. The cost of equity has been computed using the traditional **CAPM** approach. Even though the definition of a short-list of comparables is subjective, in the Zalando case, selecting them has not been pretty straightforward: as we mentioned earlier Zalando is the one of the first leading company in the fashion industry, but the competitive context is very fierce. The final choice has been done according mainly to their core operational segment (fashion and e-commerce) and secondly to their market capitalization, involving a great deal of work for the choice of them, properly described in the Comparables section of this report (please check it). In the host of companies that surround this industry, we opted for *Next PLC*, *ASOS PLC*, *boohoo Group PLC*, *Ted Baker PLC* and *Gerry Weber International AG*.

The CAPM formula requires in addition to the **risk-free rate** (that we chose as the average in 2018 of 10Y German Bunds) also a Re-levered Beta and a market risk premium (**MRP**).

In order to calculate the former, it's necessary to pick from any reliable source (in our case Bloomberg) the raw betas from the list of comparables of Zalando, and first adjust them obtaining the Adjusted Levered Betas; then, we compute the Unlevered Betas (for further details, please see Appendix, Table 2).

Remarkable is that for ASOS PLC and boohoo Group PLC we employed an adjustment that takes into account the negative net debt of them: it is a formula that considers both the market capitalization and its liquidity level.

After having calculated the re-levered beta adjusted for the negative net debt of Zalando (given that it presents a great deal of liquidity with respect to its debt) and extracted the MRP (Fernandez, 2018), we finally implement CAPM and obtain the cost of equity.

Risk Free Rate (10Y German Gov Bonds - avg2018)	1,40%
Unlevered Beta (Industry average)	85,34%
Leverage	-62,76%
Re-Levered Beta	1,39
Market Risk Premium	5,30%
Tax Rate	30,50%
Cost of Equity (Levered)	**8,76%**

In order to perform an appropriate company valuation, we approached the **DCF equity-side method**. DCF brings the closest estimate of the intrinsic value of a stock. It is widely considered the soundest valuation approach if the assumptions on which it relies are correct. Unlike other methods, DCF relies on FCFs, reliable measures that remove the most of the accounting policies used to subjectively affect firm's performance.

We chose DCF because it is not sensible to short-term market conditions that are crucial for a too much competitive industry (as the fashion e-commerce actually is), and secondly because its ability to predict can be easily enhanced including all the future expectations regarding a business. However, for a seek of completeness, in another section of this report we also performed the company valuation through the analysis of the multiples.

Valuation. Our valuation focused to capture Zalando's fundamentals on a **5-years forecast**, because of different reasons: we did not build our valuation on a less year forecast given that the fashion e-commerce sector is actually facing a stable growth yet showing more margins of growth, and Zalando has stated in its business plan its intention to ride this wave; at the same time we did not use a longer time horizon because Zalando is a German company targeting only the European market, that major studies of the sector assume to critically change in about 10 years.

The DCF equity-side approach concerns the estimation of the equity value of Zalando by the sum of the present values (PV) of **FCFE of the 5-years forecast** and the present value of the **Terminal value** (TV): the FCFE have been calculated

taking as discount factor the cost of equity previously determined; the terminal value (TV) has been computed using the traditional formula (i.e. the PV of a growing perpetuity). The equity value is the sum of PV of FCFE and PV of TV, as showed below.

Valuation	2018E	2019E	2020E	2021E	2022E	TV
FCFE	-31	35	110	189	262	11.980
Discounted FCFE	-29	30	85	135	172	7.872

Equity value	8.265
Weighted average number of shares	247
Fair price	**33**
Current market price	**27,40**
Recommendation	**NEUTRAL**

Results. The results obtained in these analyses are then compared (on a per-share basis) with broker's target prices and current stock price on the market in order to give an investment recommendation trying to capture the dynamic and ever-evolving nature of business and competition. The broker's current Market price has been extracted by Morningstar (an independent investment research agency) dated 1 December 2018. Given the results of our valuation and the analysis of the economic and financial characteristics of Zalando, we strongly recommend to stay **neutral** on Zalando.

The result of the evaluation is in line with what we expected at the beginning: even if our company is expanding its range of products with new brands and entering two new European markets, while at the same time providing an ever increasingly personalised experience for its customers, the competition is very strong.

Zalando should invest heavily to expand its logistics at least at the same rate its comparables are doing: this is the reason why the market seems to be correctly Zalando's capacity to work, and it is fairly valuing its earnings outlook.

2. Market multiples approach

In order to check the results deriving from the DCF method, we decided to develop a **market multiples analysis**.
This kind of approach proceeds from the business analysis, which allowed us to understand Zalando's market position, its business model and the several threats and opportunities that characterize the retail online sector.
In addition, the business analysis enable us to select some of Zalando's competitors that can be considered as the **suitable comparables** for our valuation. We decided to create a set of comparables operating in several geographic markets, as the target company does, and the main selection criteria were the business/financial risk and the size of the companies in terms of market capitalization. We selected:

- **Asos plc**, a British online fashion and cosmetic retailer;
- **Boohoo group plc**, a UK-based online fashion retailer;
- **Ted Baker**, a British luxury clothing retail company;
- **Gerry Weber International AG**, a fashion manufacturer and retailer based in Germany;
- **SRP group SA**, a French e-commerce company, specialised in online flash sales;
- **CCC SA**, a Poland-based company operating the footwear market.

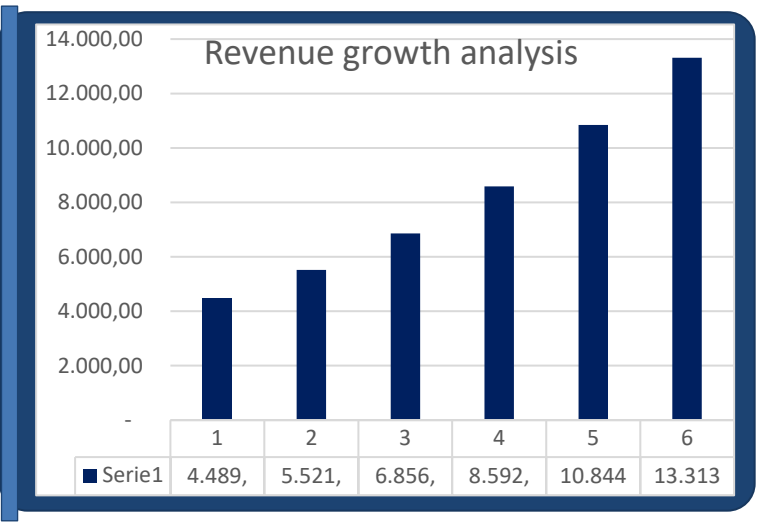
Once we collected the data, we calculated the arithmetic mean getting two asset side multiples (EV/SALES and EV/EBITDA), and two equity side multiples (P/E and P/BV). After that, we conducted a number of analyses to choose the **most suitable multiple**.
Firstly, for each market multiple we calculated the standard deviation and then, dividing it by the median value, we got the coefficient of variation. This coefficient is a statistical measure of dispersion of values, which gives us a measure of the effectiveness of the multiple for the valuation. We decided to use the **EV/EBITDA multiple** because it had the lowest coefficient of variation.

Considering the size differences among the set of comparable and the target company, we decided to apply a **size premium of 20%** to the original value of the multiple.

Finally, using Zalando's 2017 sales we calculated the Enterprise value of the company and, by subtracting the market value of Net Debt, we obtained the firm's **Equity value**, which seems to be quite lower than the one derived from the FCFE analysis. The reasons behind this huge gap are related to Zalando's competitive position: the company is a market leader, with competitive advantages, size and growth opportunities higher than its competitors.
The result of that is a **low reliability of results**.

Multiple	18,52
Size Premium	0,20
Final Multiple	22,22
Target Value	246,30
NCI	0,00
SA	0,00
Enterprise Value	5.472,79
Net Financial Position	-1.052,60
Equity value	**6.525,39**

Scenario Analysis

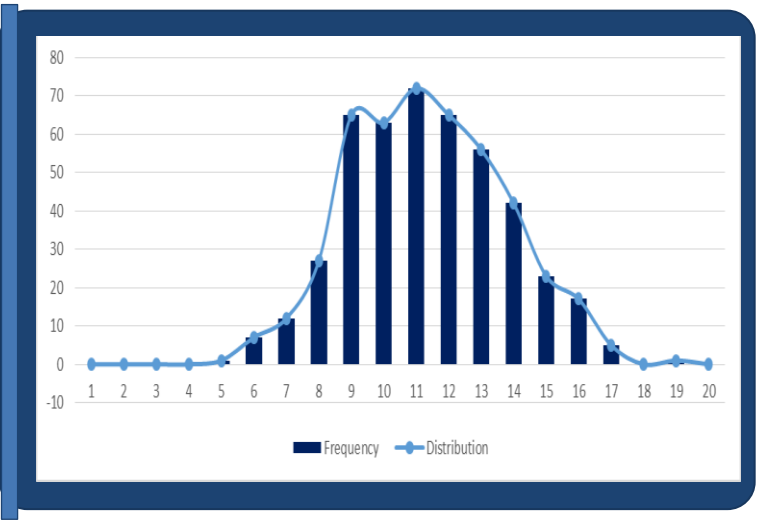


Source: Minerva Estimates

In order to complete our research, we tested our estimates on the revenues growth rate. We simulate a growth rate with "uncertainty factor", obtained adding a standard deviation of 2% (that is just like the inflation rate used in the "g" calculaton) to the CAGR we have estimated in the valuation model.
Having a random stochastic extraction, we compounded the uncertain growth rate as you can see in the following formula:

$$\boldsymbol{Growth:\ g = \mu + \sigma \cdot Z}$$

We observed a stable growth because of the high mean factor, that surely has a strong hypothesis, as e-commerce is supposed to grow very fast in the next five years.
This has anyway an uncertain impact on cash flows, that just are more conditioned by the CAPEX dynamic. Indeed, FCFF are not positive in 2018E even including uncertainty: as you noticed in our valuation chapter, there are a lot of investment and expenditure that are reducing all the good result built up by operations.



Source: Minerva Estimates

As you can notice from the frequency and distribution graphic, it will not be that easy for Zalando to reach €13.000. In fact, the 70 percentile is just on 11.000€. That just isolating the inflation effect: e-commerce trends can surely have a larger impact on revenues, profitability and, last, on cash flows. Thus, we could consider being careful and considering the e-commerce Market CAGR a big risk in our investment that we are going to investigate in a proper way in the last chapter of this report.

We finally conducted a sensitivity analysis to gauge the impact of different values for the steady state growth rate and Ke on the Price value. As it is shown in the table below, a deviance of 10 basis point, both in Ke and g TV dynamics can affect a lot the price value. This determines a fair price range between €26,70 (worst scenario) and €43,95 (best scenario).

	Ke				
g TV	**5,93%**	**6,18%**	**6,43%**	**6,68%**	**6,93%**
7,76%	43,95	50,77	60,16	73,90	95,95
8,26%	34,07	38,06	43,15	49,84	59,05
8,76%	27,69	30,29	33,45	37,37	42,36
9,26%	23,24	25,05	27,19	29,74	32,84
9,76%	19,95	21,28	22,82	24,60	26,70

Source: Minerva Estimates

Investment Risk

Growth decline, lower guidance, higher competition. Over the last months, Zalando's shares experienced a deep fall in price due to the **guidance reviewed downwards** and not meeting the investors' expectations. The motivation was brought back to higher fulfillment costs and higher discounts on summer stocks weighing on the company's profitability. Managers blamed also the unusually hot summer that delayed the switch to the autumn/winter season clothing.

However, these results are consistent with what could be considered a more general **negative trend**, as we could notice by analyzing the balance sheets. In 2017, EBITDA, EBIT and the net income decreased relative to the previous year, resulting in lower profitability ratios as well. The same is very likely to happen in 2018, lowering the returns for shareholders at least in the short term. Of course, when addressing ROE, inferior values may also be due to the small leverage and thus returns could be considered high enough relative to the limited amount of debt.

Even if the active customers are more than ever, the **average "basket" size fell** as more people shops on mobile devices where they tend to order fewer items than on a computer. Zalando attracts a growing number of younger customers who prefer to shop at lower prices, which impacts gross margin.
On the other hand, it is true that people are buying more often than in the past: overall, customers are spending more. However splitting the spending in more orders increases shipping costs and cuts margins. Most analysts believe that weaker sales growth versus consensus and continued deterioration in basket economics will disappoint and consequently adjusted the EBIT expectations to lower levels.

Zalando's goals remain quite ambitious, setting out a target to double in size by 2020 as Europe's biggest pure online fashion retailer. They are looking for ways to sell more products in each order, investing heavily in logistics and technology as **competition in the market heats up** from e-commerce players like Amazon and chains like H&M.
The British rival ASOS met its full-year sales growth forecasts, displaying years of double-digit sales growth.

Payments, technology and regulatory risk. The business concept of Zalando includes the offering of **deferred payments** to its customers. As underlined in the ratio analysis, this represents a risk that may have a large impact on the company as it directly affects the size of revenues and the degree of uncertainty associated with expected returns. Customers may not fulfill their contractual obligations, because of their financial situation or because of fraud attempts. Consequently, such a payment method implies a certain **default quota** that is anticipated by Zalando to some extent setting aside **bad debt allowances**. In 2017 the percentage of doubtful accounts was of 23.47%, the lowest in the period analyzed.

Zalando also faces the technology and regulatory risk that typically influence e-commerce companies. In particular, the business is dependent on the **stability of various online sites and services**: outages would lead to revenue losses. The **changing regulatory environment** could instead lead to additional costs coming from the compliance with the Digital Single Market initiative, the e-commerce sector inquiry of the EU Commission and the ePrivacy legislation.

Dangers from trade war? The introduction of **tariffs on goods** between China and the United States has been one of the most discussed topics since the summer. The topic is still open: will this war of tariffs have an effect on e-commerce? What kind of effects will it have on the European market?

Indeed most of the businesses import raw materials or products from other countries. These goods are likely to become more expensive when imported from the USA. However, clothing products are not subject to import duty rates so far. **Zalando should not incur to this risk**; nonetheless, given the impulsiveness of politicians and the diverse set of news coming out every month, it is still an issue worth discussing.

Analyst Certification

All of the views expressed in this report accurately reflect the personal views of the responsible analysts.

Appendix I

Cash Flows	2013	2014	2015	2016	2017
Net income for the period	-116,6	47,1	121,5	120,5	101,6
Non-cash expenses	5,3	19,8	17,9	19,9	27,5
Cash paid for settlment of claims	0	0	-2,3	0	0
Depreciation and amortization	14,9	25,8	34,2	48,2	58,7
Income taxes	0	10,5	-34,9	72,5	73,6
Income taxes paid	0	-0,2	0	-33,8	-49,4
Increase/decrease in provisions	0	1	-0,5	0,1	-1,5
Other non-cash income/expenses	-3,3	-0,2	-1	1,2	6,5
Decrease/increase in inventories	-101,1	-15,8	-145,2	-83,4	-189,4
Decrease/increase in trade and receivables	-21,6	-52,9	-9	-64	-61,6
Increase/decrease in trade payables	101,5	94,9	154,9	264,3	198,4
Increase/decrease in other assets/liabilities	40,8	44,7	-16,2	-69,7	29,2
Cash flow from operating activites	**-80,1**	**174,7**	**119,4**	**275,8**	**193,6**
Cash paid for investments in property, plant, equipment	-54,5	-29,5	-31	-122,1	-189,1
Cash paid for investments in intangible assets	-19,3	-21,5	-29	-59,6	-54,8
Cash paid for acquisitions of shares in associated companies	0	0	-16,8	-30,4	-34,9
Cash reeived/paid for investments in term deposits	0	0	-155	-65	180
Change in restricted cash	-16,4	-0,8	35,3	0	10,4
Cash flow from investing activities	**-90,2**	**-51,8**	**-196,5**	**-277,1**	**-88,4**
Cash received from capital increase	199,3	510,1	6,4	1,1	3,9
Repurchase of treasury shares	0	0	-1,7	-0,7	-6,7
Payments for shares in other entities	9,1	3,9	0	0	-4,6
Cash repayments of loans	-3,2	-3,2	-3,2	-3,2	-3,2
Cash from financing activities	**205,2**	**510,8**	**1,5**	**-2,8**	**-10,6**

Cash Flows	2013	2014	2015	2016	2017
EBIT reported	-113,9	62,1	89,6	207,0	187,6
Depreciation and Amortisation	14,9	25,8	34,2	48,2	58,7
Interest (net)	-3,3	-4,5	-3,0	-14,1	-12,4
Tax paid	0,0	-0,2	0,0	-33,8	-49,4
Other non-cash costs affecting income/expenses	2,0	19,6	14,6	21,1	34,0
Cash flow from operations before changes in w/c	**-100,3**	**102,8**	**135,4**	**228,4**	**218,5**
Decrease/increase in inventories	-101,1	-15,8	-145,2	-83,4	-189,4
Decrease/increase in trade and receivables	-21,6	-52,9	-9,0	-64,0	-61,6
Increase/decrease in trade payables	101,5	94,9	154,9	264,3	198,4

Increase/decrease in other assets/liabilities	40,8	45,7	-16,7	-69,6	27,7
Change in working capital	19,6	71,9	-16,0	47,3	-24,9
Cash flow from operating activities	**-80,7**	**174,7**	**119,4**	**275,7**	**193,6**
Capex	-73,8	-51,0	-60,0	-181,7	-243,9
Acquisitions and disposals	0,0	0,0	-16,8	-30,4	-34,9
Cash reeived/paid for investments in term deposits	0,0	0,0	-155,0	-65,0	180,0
Change in restricted cash	-16,4	-0,8	35,3	0,0	10,4
Cash flow from investing activities	**-90,2**	**-51,8**	**-196,5**	**-277,1**	**-88,4**
Cash flow before financing	**-170,9**	**122,9**	**-77,1**	**-1,4**	**105,2**
Increase/decrease in debt position	5,9	0,7	-3,2	-3,2	-7,8
Buybacks and equity issuance	199,3	510,1	4,7	0,4	-2,8
Cash flow from financing activities	**205,2**	**510,8**	**1,5**	**-2,8**	**-10,6**
Increase/decrease in liquid assets	**34,3**	**633,7**	**-75,6**	**-4,2**	**94,6**
Liquid assets at end of period	417,161	976,2	1051,0	972,6	1065,5
Free Cash Flow (to equity)	**-148,6**	**124,4**	**56,2**	**90,8**	**-58,1**

Table 1:

	CAGR 2013-2017
Sales	20,57%
Cost of sales	19,29%

Digital Market Outlook: e-commerce revenue in Europe 2016-2022, Fashion sector							
Year	**2017**	**2018**	**2019**	**2020**	**2021**	**2022**	**CAGR Long term**
Revenues (M$)	100674	112.018	123.437	134.341	144.279	152.989	**0,06432553**
Growth rate		11,27%	10,19%	8,83%	7,40%	6,04%	

source: Statista

Crescita PIL Reale - Unione Europea							
Year	**2017**	**2018**	**2019**	**2020**	**2021**	**2022**	**2023**
Real GDP growth (Ann. %)	2,70%	2,20%	2,00%	1,80%	1,70%	1,70%	1,60%

source: IMF Databank

Crescita Inflazione - Unione Europea							
Year	**2017**	**2018**	**2019**	**2020**	**2021**	**2022**	**2023**
Inflation rate, avg consumer prices, growth	1,70%	1,90%	1,90%	1,90%	2,00%	2,10%	2,10%

source: IMF Databank

Table 2:

	Currency	Shareholder's equity (Mil€)	Net debt	Leverage	Raw 5y beta	Adjusted levered beta	Corporate tax rate	Unlevered beta
Next PLC	£	483,00	1286,00	266,25%	0,72	0,81	19,00%	0,26
ASOS PLC	£	287,10	-160,00	(55,73%)	1,35		19,00%	1,40
boohoo Group PLC	£	213,00	-133,00	(62,44%)	1,16		19,00%	1,24
Ted Baker PLC	£	224,00	112,00	50,00%	0,74	0,83	19,00%	0,59
Gerry Weber International AG	€	413,00	193,00	46,73%	1,05	1,03	29,79%	0,78
							Average	**0,85**

Business risk	ASOS PLC	BOOHOO GROUP PLC	TED BAKER	Gerry Weber International AG	SRP Groupe SA	CCC SA
Sales	2.73B	658.58M	674.12M	880.89M	134.88M	985.42M
EBITDA margin	6.62%	9.26%	15.88%	6.90%	0.20%	12.56%
NI	93.12M	35.95M	60.09M	-781.50k	-5.81M	67.41M

Size	ASOS PLC	BOOHOO GROUP PLC	TED BAKER	Gerry Weber International AG	SRP Groupe SA	CCC SA
Market capitalization	4.83B	2.63B	885.43M	125.09M	8.10B	1.70B

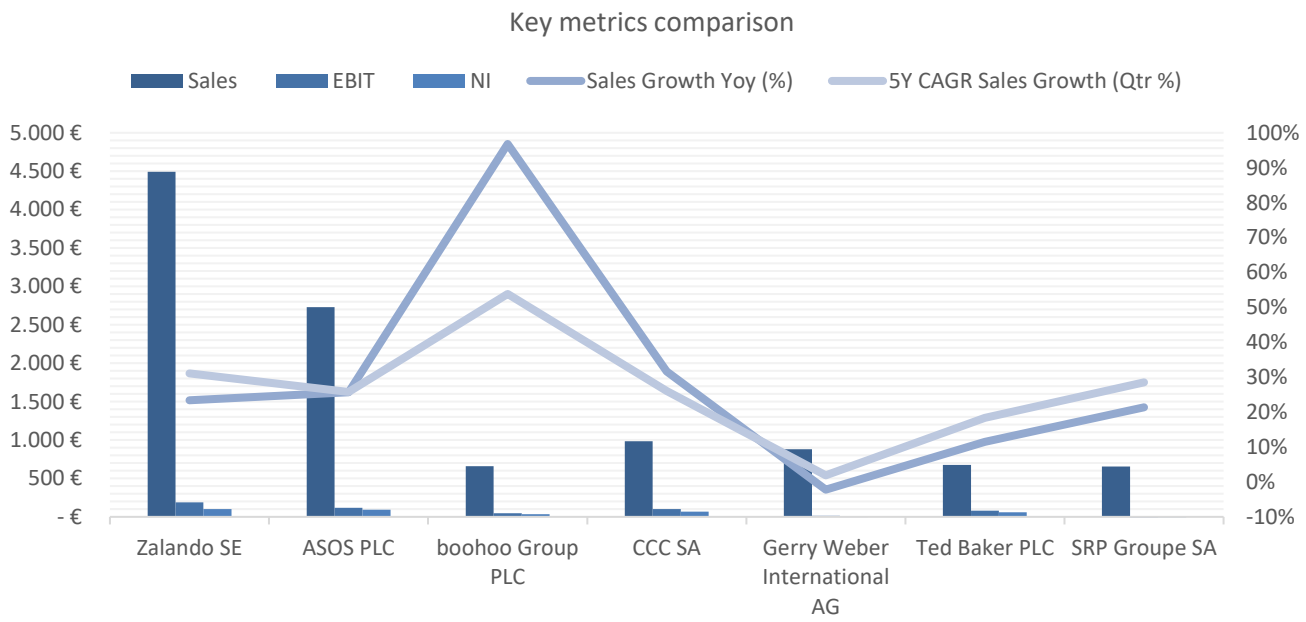
	ASOS PLC	BOOHOO GROUP PLC	TED BAKER	Gerry Weber International AG	SRP Groupe SA	CCC SA
P/E	43,63	49,39	13,11	NA	NA	26,46
P/BV	11,65	10,46	6,01	1,17	1,12	10,66
EV/EBITDA	20,86	27,57	8,86	12,06	21,39	20,36
EV/SALES	2,1	2,66	1,83	0,57	0,39	2,64

	Mean	Standard deviation	Deviation coefficient
P/E	35,38	19,50	0,55
P/BV	6,85	4,97	0,73
EV/EBITDA	18,52	6,84	0,37
EV/SALES	1,70	0,99	0,58

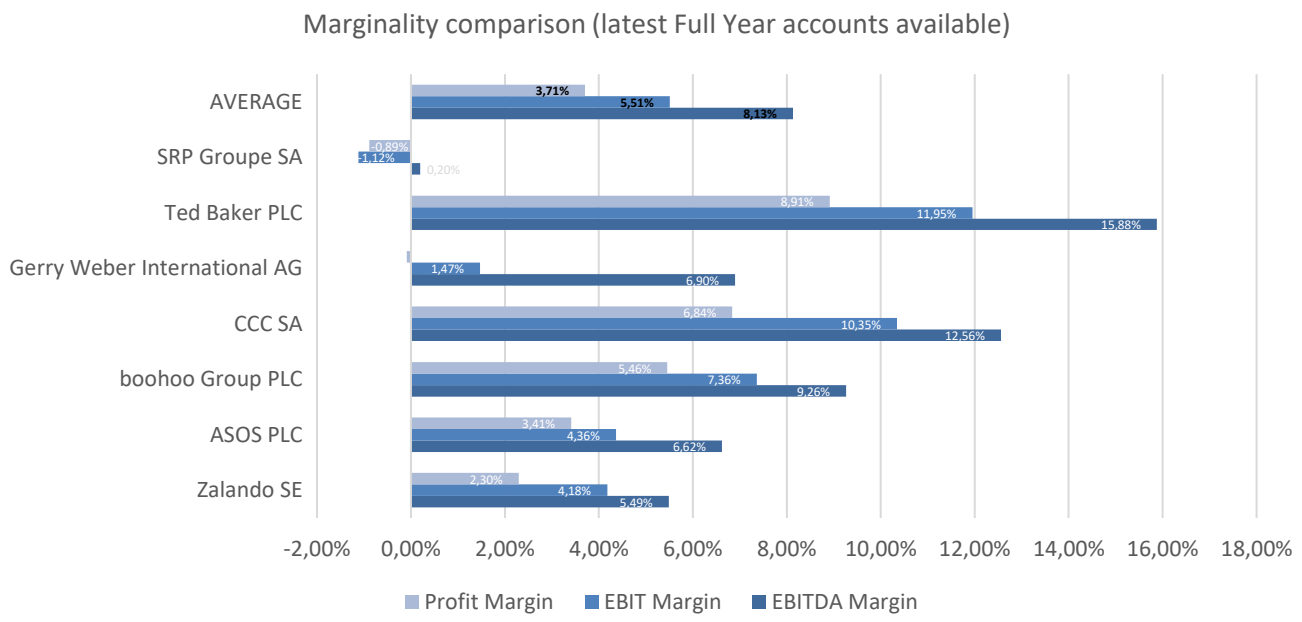
Appendix II

Zalando's market share and key competitors

We identified the following competitors for the company: ASOS PLC, boohoo Group PLC, CCC SA, Gerry Weber International AG, Ted Baker PLC, SRP Groupe SA, Amazon Inc. (through Amazon Fashion) and Yoox-Net-A- Porter SpA (which was recently acquired by Richemont). Key metrics for Amazon Fashion is not disclosed by Amazon, while Yoox-Net-A-Porter is not a public company anymore.



source: Minerva elaboration based on Bloomberg data. There is not a perfect match between these companies' fiscal years periods.



source: Minerva elaboration based on Bloomberg data. There is not a perfect match between these companies' fiscal years periods.

We also computed Zalando's historical market shares in 13 of the 15 countries where it was active at the end of 2017:

Country	2012	2013	2014	2015	2016	2017
Poland	0,7%	1,2%	1,3%	1,5%	1,5%	1,6%
Austria	1,2%	1,9%	2,6%	3,2%	3,5%	3,6%
Belgium	n.a.	0,8%	1,1%	1,2%	1,4%	1,5%
Denmark	0,5%	0,9%	1,3%	1,8%	2,9%	3,5%
Finland	1,8%	2,5%	3,0%	3,2%	3,4%	3,5%
France	0,6%	0,6%	0,7%	0,9%	1,0%	1,0%
Germany	1,4%	1,6%	1,9%	2,2%	2,4%	2,9%
Italy	0,1%	0,1%	0,2%	0,2%	0,2%	0,2%
Netherlands	2,8%	4,0%	5,0%	4,7%	5,2%	5,3%
Norway	1,9%	2,1%	2,8%	3,0%	3,0%	4,2%
Spain	0,1%	0,1%	0,1%	0,2%	0,2%	0,3%
Sweden	0,5%	1,1%	1,6%	2,1%	2,5%	2,5%
Switzerland	2,6%	3,8%	4,6%	5,5%	6,7%	8,5%

source: Minerva elaboration based on Euromonitor data. "Retail Value RSP excl Sales Tax" values in the "Non-Store Retailing" category.

Zalando is particularly strong in the DACH region (Germany, Austria, Switzerland), as well as in the Nordic countries.

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