



## Valuation Report

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## 1. Description

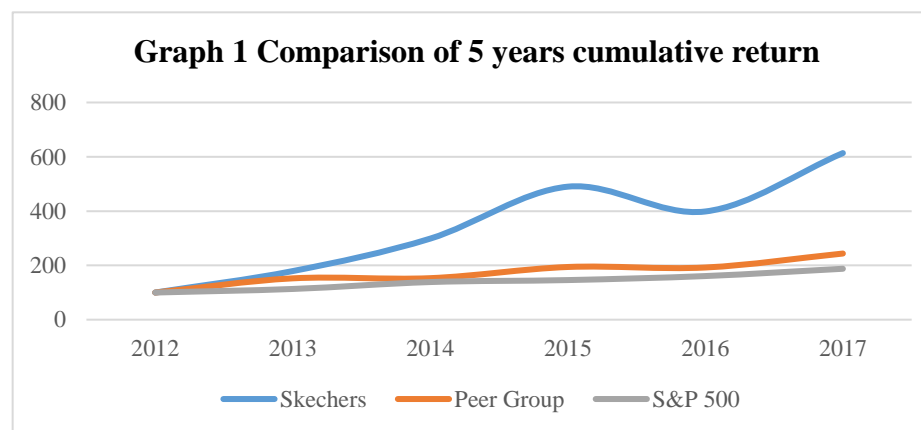
Skechers U.S.A., Inc. (“Skechers”) is a company incorporated in Delaware, United States that designs and markets casual and athletic footwear for men, women, and children. Its products are manufactured by independent contractors overseas and distributed through the wholesale, retail, and e-commerce both domestically and internationally. It was first listed in the New York Stock Exchange in the United States in 1999, with ticker as “SKX”.

As of February 15, 2018, they owned and operated 117 concept stores, 170 factory outlet stores and 162 warehouse outlet stores in the United States, and 120 concept stores, 67 factory outlet stores, and 9 warehouse outlet stores internationally. The company’s objective is to continue to profitably grow their domestic operations while leveraging their brand name to expand internationally.

## 2. Summary of Historical Five-Year Financial Performance

### 2.1 Highlights in the Annual Reports

Skechers has been in quite a high growth phase from 2013 to 2017. Past five years have seen an increase in sales revenue from \$1846.36 million to \$4164.16 million with an average annual growth rate of 21.91%, primarily credit to the booming international wholesale and retail segments. Net income increased from \$54.79 million to \$179.19 million with a declining high growth rate averaged 135% per annum. Operating working capital rose from \$322.50 million to \$781.06 million, indicating an average annual growth rate of 21.81%. All data obtained are financial year end figures (December 31st).



The following table sets forth some important figures reflecting Skechers' operational performance (in \$ millions) from its annual reports.

<b>Table 1</b>	<b>2017</b>	<b>2016</b>	<b>2015</b>	<b>2014</b>	<b>2013</b>
<b>Revenues</b>	4164.16	3563.31	3147.32	2377.56	1846.36
<b>Revenue Growth</b>	16.86%	13.22%	32.38%	28.77%	18.33%
<b>Operating Margin</b>	9.19%	10.40%	11.15%	8.79%	5.07%
<b>EBIT</b>	382.88	370.52	350.82	209.07	93.60
<b>Net Income</b>	179.19	243.49	231.91	138.81	54.79
<b>Net Income Growth</b>	-26.41%	4.99%	67.07%	153.36%	475.99%
<b>Operating Working Capital</b>	781.06	495.37	478.90	396.95	322.50
<b>Operating Working Capital Growth</b>	57.67%	3.44%	20.65%	23.09%	4.20%
<b>Cash and Cash Equivalents</b>	736.431	718.536	507.991	466.685	372.011
<b>Cash and Cash Equivalents Growth</b>	2.49%	41.45%	8.85%	25.45%	14.17%

## 2.2 Adjustments of Reported Financials

In addition to the reported financials set forth above, corrections are necessary since conventional accounting principles treat financial expenses and capital expenditures as operating expenses, which produces artificially low operating profits, artificially low invested capital, and thus artificially high capital efficiency as measured by Return on Invested Capital (ROIC).

To provide a more proper view of Skechers' ROIC, two adjustments are made based on reported financials. Firstly, operating leases are capitalized to bring out the off-balance sheet financing. Secondly, research & development expenses are capitalized to reflect the long-term benefits generated by these investments. The processes are as explained in detail below.

### 2.2.1 Capitalizing Operating Leases

Operating leases are treated as operating expenses, but actually financial expenses. Thus, certain adjustment is needed to consider it as purchase the asset and borrow fund to finance it. With the schedules for future operating leases at the end of each year in the financial statements (Appendix I) and the discount rate (cost of debt) of 3.50% (detailed calculation in Section 3.2.8), we obtain the capitalized lease obligations (CLO) at the end of each year.

Implicit Interest Expense = Cost of Debt \* Average CLO = Cost of Debt \* (Beginning CLO + Ending CLO)/2.

By adding back this implicit interest expense embedded in operating lease payments to EBIT we obtained the adjusted EBIT.

<b>Table 2 CLO Adjustments</b>	<b>2017</b>	<b>2016</b>	<b>2015</b>	<b>2014</b>	<b>2013</b>
<b>CLO = LA</b>	1,328.98	1,168.98	1,075.86	903.38	759.34
<b>Increase in Leased Assets</b>	160.01	93.12	172.48	144.04	677.22
<b>Average CLO</b>	1248.98	1122.42	989.62	831.36	718.28
<b><u>Implicit Interest Expenses</u></b>	<u>43.70</u>	<u>39.27</u>	<u>34.63</u>	<u>29.09</u>	<u>23.22</u>

### 2.2.2 Capitalizing Research & Development Expenses

R&D generates future economic benefits and thus should be changed from operating expenses to assets. With the assumed amortization life for R&D to be 5 years, we collect past R&D expenses and sum up their unamortized residual and amortization of that particular year (Appendix II). For simplicity, it is assumed that R&D was incurred at the year end, therefore R&D of Year 0 would start being amortized in Year 1. The changes in EBIT = +R&D Expenses - Amortization.

<b>Table 3 R&amp;D Adjustments</b>	<b>2017</b>	<b>2016</b>	<b>2015</b>	<b>2014</b>	<b>2013</b>
<b>R&amp;D Expenses</b>	18.80	13.60	11.20	10.30	9.20
<b>Value of R&amp;D Assets</b>	42.36	34.32	31.94	32.24	33.24
<b>Amortization of R&amp;D assets</b>	10.76	11.22	11.5	11.3	11.22
<b><u>Changes in EBIT</u></b>	<u>8.04</u>	<u>2.38</u>	<u>-0.30</u>	<u>-1.00</u>	<u>-2.02</u>

<b>Table 4 Adjusted Financials</b>	<b>2017</b>	<b>2016</b>	<b>2015</b>	<b>2014</b>	<b>2013</b>
<b>Reported EBIT (a)</b>	382.88	370.52	350.82	209.07	93.60
<b>Total Changes in EBIT from CLO and R&amp;D (b)</b>	51.74	41.65	34.33	28.09	23.11
<b>Adjusted EBIT (c) = (a) + (b)</b>	426.58	409.79	385.45	238.16	118.74
<b>Accrued Income Tax Expense (d)</b>	149.16	74.13	72.45	39.18	21.35
<b>Adjusted NOPAT (e) = (c) – (d)</b>	277.43	335.67	313.00	198.98	97.39
<b>Leased Assets (f)</b>	1,328.98	1,168.98	1,075.86	903.38	759.34
<b>Increase in Leased Assets (g)</b>	160.01	93.12	172.48	144.04	677.22
<b>R&amp;D Expenses-Amortization in R&amp;D Assets (h)</b>	8.04	2.38	-0.30	-1.00	-2.02
<b>Value of R&amp;D Assets (i)</b>	42.36	34.32	31.94	32.24	33.24
<b>Reported Net CAPEX (j)</b>	267.21	53.39	120.71	9.35	85.90
<b>Adjusted Net CAPEX (k) = (j) + (g) + (h)</b>	435.26	148.88	292.89	152.39	761.10
<b>Operating Working Capital (l)</b>	781.06	495.37	478.90	396.95	322.50
<b>Increase in Operating Working Capital (m)</b>	285.69	16.47	81.95	74.45	12.99
<b>Reported Invested Capital (n)</b>	1322.66	989.84	914.81	770.13	684.25
<b>Adjusted Invested Capital (o) = (n) + (f) + (i)</b>	2,651.64	2,193.14	2,022.61	1,075.75	1476.83
<b>Adjusted Average Invested Capital (p)</b>	2,422.39	2,107.88	1,549.18	1,276.29	1,430.63
<b>Adjusted Net Investment (q) = (k) + (m)</b>	720.95	165.35	374.85	226.84	774.09
<b>Adjusted ROIC (r) = (e) / (p)</b>	11.45%	15.92%	20.20%	15.59%	6.81%
<b>Adjusted RIR (s) = (q) / (e)</b>	259.87%	49.26%	119.76%	114.00%	794.84%

## 3. DCF Valuation

### 3.1 Building Blocks of Valuation

To obtain the intrinsic value of a company, the Discounted Cash Flow (DCF) approach is often employed. DCF means to predict future cash flows generated by the firm and discount them with a risk-adjusted rate, which is a reasonable measurement of the company's economic value.

There are three widely used DCF models: Dividend Discount Model (DDM), Free Cash Flow to Equity (FCFE) model, and Free Cash Flow to Firm (FCFF) model. While selecting a DCF model, three key variables need to be catered: cash flows, discount rates, and growth pattern. In our case to value Skechers, DDM model is excluded because the company does not pay dividends for the past five years. As FCFE requires considering interest expenses which are quite complicated and easy to make mistakes, we adopt the FCFF method, using the weighted average cost of capital (WACC) as the proper discount rates. While calculating the WACC, we also use the CAPM model to estimate the cost of equity. We also utilize a 3-stage growth model because 1) Skechers has experienced high growth from 2013 to 2017 with an annual growth rate of 17.79%, which is greater than the conventional benchmark of 10%; 2) Skechers' recognized brand name creates barriers to entry into the footwear business, hence it can maintain a high ROIC in the short-term.

The following analysis will look at different nominal inputs as well as their trends, make assumptions about future outlook based on past financial performance to be utilized in DCF model.

### 3.2 Discount rate – WACC

#### 3.2.1 Risk-free rate

The 10-year U.S. Treasury Note yield 2.96% on April 28, 2018 is used as the current risk-free rate. This is because 1) it is a long-term risk-free rate that matches the time horizon of Skechers' presumably infinite cash flows, and 2) it is the most liquid part of the Treasuries.

#### 3.2.2 Equity Risk Premium and Country Risk Premium

Equity risk premium (ERP) is the extra returns demanded by risk-averse investors, relative to the risk-free rate, to invest in the stock markets. Country Risk Premium (CRP) is the additional returns these investors require when investing in other countries that are not default-free. According to Damodaran's website, the U.S. has an equity risk premium of 5.08%. Besides, as the U.S. economy is a mature market, it is assumed that it does not have default risks and hence zero CRP.

There are two methods to calculate the CRP: one is location based (place of incorporation) and one is operation based. As a U.S. incorporated company with international operations, Skechers is exposed to country risks from many other nations. Thus we adopt an operation-based CRP approach -- the CRP for a

company can be computed as the weighted average of the CRPs of the countries in which the company operates, with the weights based on revenues. Since Skechers is an multinational that is exposed to a dozen of countries and plans to continues its global expansion strategy, we assume equal exposure in countries other than the U.S. and take arithmetic average of all the regional CRPs except for the U.S., which is 3.37%; with revenues weights obtained from latest annual reports, we obtained a total CRP =  $49.36\% \times 0.00$  (United States) +  $3.85\% \times 0.00$  (Canada) +  $46.79\% \times 3.37\%$  (Other International) = **1.58%**, and total ERP = Mature Market ERP + Total CRP =  $5.08\% + 1.58\% = \mathbf{6.66\%}$ .

### 3.2.3 Market Value of Debt

Skechers states in the statements that it has short and long-term borrowings. Its short-term borrowings are \$8.01 million, here we assume the book value and the market value is the same. According to Skechers' 2017 annual reports, it has several long-term borrowings. One credit arrangement with BAML has a face value of \$66.6 million, cost of debt 3.50% and interest rate fixed at 4.08% through a swap contract. Hence the market value of this debt is \$67.52 million. The remaining two smaller long-term debts have market value of 5.18 million and 0.58 million respectively. The capitalized operating leases at the end of 2017 is \$1,328.98 million. Hence total market value of debt = \$8.01 million + \$67.52 million + \$5.18 million + \$0.58 million + \$1,328.98 million = **\$1,410.27 million**.

### 3.2.4 Market Value of Equity

Currently Skechers has a total of 160.05 million shares outstanding trading at \$29.08 per share as of April 29, 2018. There are two classes of common stocks, Class A of 135.71 million shares and Class B of 24.34 million shares. All shareholders have identical rights except that the Class A shareholders are entitled to one vote per share while Class B shareholders are entitled to ten votes per share. Hence the market value of common stock is  $\$29.08 \times 160.05 \text{ million} = \mathbf{\$4,654.42 \text{ million}}$ . Since Skechers doesn't issue options, the market value of equity equals to its market value of common stock.

### 3.2.5 Tax Rate: Effective Book Rate

We use book tax expense reported on Skechers' financial statements because this is easier to forecasts and the differences between accrual basis and cash basis will reverse over time.

As Skechers has operations in different jurisdictions, in principle we should compute a "blended" marginal tax rate based on the breakdown of EBIT by country. However, as the company does not disclose its EBIT distribution by countries or regions (only the U.S., Canada, and other internationals), we utilized an alternative, effective tax rates, as a proxy for the blended rate. By referring to Damodaran's website on which the effective aggregate tax rates by industry are specified, we assume the tax rates for footwear design and footwear stores industries to be 25% and 35% respectively.

One important tax consideration for Skechers is the enactment of the Tax Cuts and Jobs Act in December 2017, which caused its effective tax rate to jump to 38.8% (the U.S. corporate tax rates drop from 40% to 27% according to KPMG Corporate Tax Tables) for the year ended on December 31, 2017. Before that the effective tax rates are around 20% and the average tax rates for the past three years is approximately 26%, which is aligned with the weighted average of



industry tax rates. Hence by using 26% as the constant tax rate for forecasting, we can effectively remove the distortion from non-operating and non-occurring activities like the U.S. corporate tax reform. Noteworthy is that the regulations of the tax reform might be revised in the future, and due to its complexity, we do not factor this into our valuation.

Additionally, since Skechers has positive EBIT and no Net Operating Loss Carry Forward (NOL) for the past five years, the taxable income is equal to EBIT.

### 3.2.6 CAPM Beta: Bottom-up Approach

There are two common approaches to estimate beta of a stock: one is single regression, and the other one is bottom-up beta. The latter one is adopted here because it has lower standard errors and can be adjusted to reflect changes in the firm's business mix and financial leverage while the former one can only captures the historical beta.

We start with identifying the two lines of businesses Skechers is by sourcing Bloomberg: footwear design and footwear stores. Then we piled up lists of the publicly traded comparable companies in corresponding businesses, obtained their regression beta together with debt to equity ratios (D/E), and compute the simple averages of betas and D/E ratios. During this process, we filtered out some companies according to their product characteristics as well -- for example, some luxury firms are excluded from the lists because their products are far different from athletic ones in Skechers. The unlevered beta for the businesses are obtained by this formula: Unlevered beta for business = Average beta across publicly traded firms / (1 + (1-t) \* D/E). The unlevered beta is **0.84** for footwear design and **0.86** for footwear stores.

Then we move on to estimate how much value Skechers derives from the two businesses. Here we use the value of each business as weights by multiplying industry EV/Sales by Sales. It is concluded that Skechers has **87.97%** in footwear design and **12.03%** in footwear stores. From the past five year annual reports, we think Skechers will maintain its current business mix for a long time, therefore, Skechers' bottom-up unlevered beta =  $87.97\% * 0.84 + 12.03\% * 0.86 = \mathbf{0.8426}$ .

The final step is to lever up Skechers' bottom-up unlevered beta by its market debt-to equity ratio. We obtained Skechers' D/E ratio which is 1.82 from Bloomberg, assuming it will not change over time. Skechers' levered beta = Skechers' unlevered beta \* (1 + (1 - t) \* D/E) =  $0.8426 * (1 + (1 - 26\%) * 0.3102) = \mathbf{1.0360}$

### 3.2.7 Cost of Equity

Hence Skechers' Cost of Equity = Risk-free Rate + Levered Beta \* Total ERP =  $2.96\% + 1.0360 * 6.66\% = \mathbf{9.85\%}$ .

### 3.2.8 Cost of Debt

Cost of debt is the firm's current long-term borrowing cost (preferably 10 year yield to maturity) which reflects both current risk-free rate and default spread. There are three ways to estimate a company's cost of debt: using yield to maturity of a straight bond issued by the firm, using credit rating to find the default spread, and using synthetic rating based on certain financial characteristics to find out the default spread.

However, Skechers do not have such long-term, liquid and actively traded straight bonds, and direct credit ratings from Moody's, S&P, and Fitch are not available; therefore we adopt the third approach -- using Times Interest Earned (or interest coverage ratio) = EBIT/Interest Expenses, which is  $382.88/6.677 = 57.34$  times. According to Damodaran's website updated on January 1, 2018, large non-financial companies with market capitalization greater than \$5 billion and interest coverage ratio greater than 8.50 times should have an Aaa/AAA synthetic rating (investment grade) and company default spread of 0.54%. Therefore, cost of debt = risk-free rate + country default spread + company default spread =  $2.96\% + 0\% + 0.54\% = 3.50\%$ .

### **3.2.9 Preferred Stock & Convertible Bond**

According to its financial statements, Skechers has no convertible bond. It is authorized to issue preferred stocks but hasn't done so, hence with zero amount and is not considered in this valuation.

### **3.2.10 Weighted Average Cost of Capital**

The weighted average cost of capital (WACC) = Weight of Equity \* Cost of Equity + Weight of Debt \* Cost of Debt \* (1 – Tax Rate) =  $76.32\% * 9.85\% + 23.68\% * 3.50\% * (1 - 26\%) = 8.13\%$

## **3.3 Growth Model Preparation**

### **3.3.1 ROIC Analysis**

The ability to sustain ROIC is critical to a firm's valuation. Footwear and apparel industry are personal consumer products industry, which is ranked no.5 by median industry ROIC, where companies can develop long-lasting brands that make it difficult for new competitors to gain a foothold. Moreover, there are moderate opportunities for innovation, such as styles, comfort, quality, etc. Skechers have a significant number of trademarks, design patents and other proprietary rights and continuously emphasizes on innovation. Also, it has certain brand name considering its large portion of sales from small number of wholesalers and consistent customer recognition. Thus, combining the industry nature and Skechers' competitive advantage, we would expect a sustainable ROIC in relatively a long period.

### **3.3.2 Future Growth Model: Fundamental Approach**

On the basis of analyzing past financials, there are basically three approaches to estimate the future growth in revenues or earnings: the historical approach, analysts' forecasts, and the fundamental approach. Although historical arithmetic average growth rates are easy to compute and provide good starting points for

future estimation, it might be distorted due to enlarging size of the company. Moreover, analysts' forecasts for growth is also quite limited for the five-year horizon.

Hence we adopted the third approach because growth ultimately stems from fundamentals -- how much the firm is investing in new assets (Reinvestment Rate, or RIR) and what returns these assets are generating for the firm (Return on Invested Capital, or ROIC). We calculate the growth  $g = \text{ROIC} \times \text{RIR}$ ,

The following analysis will be the projection of future Free Cash Flows to Firms.

Horizontally, there will be in three phases: the high growth period (2018-2020), the transition period (2021-2025), and the stable growth period (2026 and thereafter). We choose an eight-year horizon as the explicit forecast period because we believe that this is the length long enough for the company to reach a steady state. Each phase has its own assumptions based on historical financials and Skechers' strategies mentioned in the financial statements.

Vertically, we use line by line forecasting for income statements and invested capital. Revenue is on the first line because many other items are directly or indirectly pecked to it, which is followed by cost of goods sold and selling, general, and administrative expenses.

### 3.3.3 Summary of Major Forecast Assumptions

<b>Table 5 Forecast Assumptions</b>	<b>High Growth Period (2018-2020)</b>	<b>Transition Period (2021-2025)</b>	<b>Terminal (2026 and thereafter)</b>
<b>ROIC</b>	11.50%	Gradual decrease from 11.50% to 8.5%	8.5%
<b>Revenue Growth Rate</b>	17% to 16%	Gradual decrease from 16% to 3%	3%
<b>RIR</b>	148% - 139%	Gradual decrease from 139% to 35%	35%
<b>COGS (as % of Revenue)</b>	52% - 51%	Gradual decrease from 51% to 45%	45%
<b>SG&amp;A (as % of Revenue)</b>	36%	Gradual decrease from 36% to 30%	30%
<b>Depreciation (as % of Revenue)</b>	Constant at 2%		
<b>Net CAPEX (as % of Revenue)</b>	9% - 7%	Gradual decrease from 7% to 4%	4%
<b>Year End WC (as % of Revenue)</b>	19% - 21%	Gradual increase from 21% to 25%	25%

- **ROIC:** The arithmetic average of ROIC in the past five years is 13.99% and the past three years is 15.86%. The ROIC in the most recent year (2017) is 11.45%. We further look at the operating margin to forecast the future trend of ROIC because  $ROIC = (1-t) \times \text{Operating Margin} \times \text{Revenue} / \text{Invested Capital}$ . The average operating margin for the apparel and shoe industry is around 9% (Damodaran's website), while Skechers' is 10.09% in the past five years, thus as it becomes more mature, its margin might be gradually squeezed to the industrial average due to fierce competition. Hence, we estimate ROIC to be 11.50% in 2018, which then gradually converge to slightly higher than the WACC (8.13%). As Skechers possesses competitive advantages in the apparel and footwear industry such as brand name and superior quality, its long-term ROIC will still be above its WACC, in the steady state.
- **Growth rate:** The arithmetic average growth is 21.91% for the past five years and 15.04% for the past three years. The growth rate in the latest year (2017) is 16.86%. Hence, we estimate revenue growth to be 17% in 2018, and then gradually converge to the U.S. GDP growth rate of 3%.
- **RIR:** The arithmetic average growth is 267.55% for the past five years and 142.96% for the past three years. The RIR for the last year (2017) is 259.87%. We calculate future RIR according to  $RIR = g/ROIC$ . As the company continues its global expansion strategy, its capital expenditure will maintain high in the short-run at about 148% and gradually decrease to 35%.
- **COGS:** The arithmetic average of COGS as a percentage of revenue is 54.58% for the past five years and 54.11% for the past three years. This figure in the latest year (2017) is 53.44%. Since the company emphasizes on controlling production costs while selecting manufacturers, there seems to be room for it to reduce the we forecast next year's COGS as a percentage of revenue will be 52%, and gradually deteriorates to 45%.
- **SG&A:** The arithmetic average of SG&A as a percentage of revenue is 54.58% for the past five years and 54.11% for the past three years. This figure in the latest year (2017) is 36.89%. As the company has initiated many marketing campaigns, we estimate SG&A will remain at the high level for a while and then deteriorate to 30% as it establishes stronger brand name and requires less extensive advertisements.
- **Depreciation:** The arithmetic average of depreciation as a percentage of revenue is 1.96% for the past five years and 1.84% for the past three years. This figure in the latest year (2017) is 1.99%. As this figure is rather stable despite Skechers' aggressive expansion, we estimate the percentage to be slightly higher than current and constant at 2% as the company builds more stores overseas.
- **Net CAPEX:** The arithmetic average of Net CAPEX as a percentage of revenue is 14.31% for the past five years and 7.98% for the past three years. This figure in the latest year (2017) is 10.45%. The average Net CAPEX/Sales ratio for the apparel is around 4% (Damodaran's website). As it completes the expansion projects, Net CAPEX will decrease. Hence, we estimate this number to be 9% in 2018, which later will converge to the industrial average of 4%.

- **Year-end WC:** The arithmetic average of Year-end WC as a percentage of revenue is 16.41% for the past five years and 15.96% for the past three years. This figure in the latest year (2017) is 18.76%. The average Non-cash WC/Sales ratio for the apparel and shoe industry is around 25% (Damodaran's website). As its sales activities increases, the needs for working capital might also increase. Hence we estimate this number to be 19% in 2018, which later will converge to the industrial average of 25%.
- **Others:** D/E ratio and WACC are assumed to be constant for the valuation period as it is currently close to industrial median. Tax rate is fixed at 26%.

The table below sets forth the key projections for the next eight years and thereafter.

<b>Table 6 FCFF Forecasts (\$mm)</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>	<b>2023</b>	<b>2024</b>	<b>2025</b>	<b>2026 and thereafter</b>
<b>Revenues</b>	4872.07	5700.32	6612.37	7527.08	8405.24	9203.74	9878.68	10389.08	10700.75
<b>Revenue Growth</b>	17.00%	17.00%	16.00%	13.83%	11.67%	9.50%	7.33%	5.17%	3.00%
<b>ROIC</b>	11.50%	11.50%	11.50%	11.00%	10.50%	10.00%	9.50%	9.00%	8.50%
<b>RIR</b>	148%	148%	139%	126%	111%	95%	77%	57%	35%
<b>COGS</b>	2533.47	2935.66	3372.31	3763.54	4118.57	4417.79	4642.98	4778.98	4815.34
<b>SG&amp;A Expenses</b>	1753.94	2052.11	2380.45	2634.48	2857.78	3037.23	3161.18	3220.61	3210.22
<b>Operating Expenses</b>	4287.42	4987.78	5752.76	6398.02	6976.35	7455.03	7804.16	7999.59	8025.56
<b>EBIT</b>	487.21	598.53	727.36	978.52	1260.79	1564.64	1876.95	2181.71	2461.17
<b>NOPAT</b>	360.53	442.91	538.25	724.11	932.98	1157.83	1388.94	1614.46	1821.27
<b>Net CAPEX</b>	438.49	456.03	462.87	489.26	504.31	506.21	493.93	467.51	428.03
<b>Increase in Operating Working Capital</b>	214.37	248.53	242.27	246.30	239.69	221.09	190.05	147.18	104.30
<b>FCFF</b>	<b>-292.32</b>	<b>-261.64</b>	<b>-166.89</b>	<b>-11.46</b>	<b>188.98</b>	<b>430.53</b>	<b>704.95</b>	<b>999.78</b>	<b>1288.94</b>

### 3.4 Value of Operating Assets

The market value of operating assets = Present Value of Future Free Cash Flows = \$14,133.64 million. We assume that Skechers' cash flows are generated throughout the year and adjust the present value upward by half a year with adjusted  $PV = PV \cdot (1 + WACC/2)$ . The adjusted market value of operating assets is **\$11,266.36 million**.

### 3.5 Tightening the Ends of Valuation

#### 3.5.1 Non-controlling Interests

The Company has equity interests in several joint ventures that were established either to exclusively distribute the Company's products throughout Asia and the Middle East or to construct the Company's domestic distribution, and all of them are in control and are consolidated. It has 77 subsidiaries in total, with no passive investments or investment in associates. Except for those 100% owned, there are mainly two components of non-controlling interests. The one is from, HF Logistics-SKX, LLC, in which 50% is held, and the other is distribution joint ventures, which includes Skechers Limited (Israel) (51%), Skechers China Limited (50%), Skechers Korea Limited (65%), Skechers Southeast Asia Limited (50%), Skechers Retail India Private Limited (51%), and Skechers South Asia Private Limited (51%), etc. As the long list of Skechers' subsidiaries, we take arithmetic average of its holding percentage: 51.5%. Also, as most of these subsidiaries are private companies, we choose to use adjusted book value method. Using the industry PB ratio of 4.3, non-controlling proportion and book value of equity of subsidiaries, we can finally determine the non-controlling interest to be **\$679.27 million**.

#### 3.5.2 Intrinsic Value per Share

Value of operating assets: 11,266.36 million

+ Cash and marketable securities: 736.431 million

- Value of non-controlling interest: 679.27 million

= Value of firm: 11,323.52 million

- Value of debt: 1,410.27 million

= Value of equity: 9,913.25 million

- Value of equity options: 0

= Value of common stock: 9,913.25 million

Number of shares outstanding: 160.05 million

Intrinsic value per share: \$74.93

## 4. Relative Valuation

While DCF assumes a longer investment horizon, relative valuation reflects the current market condition and provide advice for action. After analyzing several multiples, we reach at a conclusion that Skechers is well undervalued.

### 4.1 Identify comparable companies

We select 11 comparable companies using the criteria:

1. in the same industry-footwear and apparel and share almost the same businesses;
2. US listed and similar operating regions, which includes US and other international parts;
3. Form kind of competition with Skechers regarding some products, which are mentioned in Skechers' financial report.

As we didn't control for similar fundamentals on selected companies, they vary on company size, growth etc., but Skechers tends to be in the middle regarding market capitalization, enterprise value, growth rate, beta, operating margin, etc. The details of these comparable companies are included in the Appendix III.

### 4.2 Multiples Screening & Definitional tests & Analytical Test

Table 7 Multiples

Equity Multiples	Firm Multiples
<p>(1) PE Ratio</p> <p>Current market price per share/ EPS TTM</p> $\frac{P_0}{EPS_0} = \frac{Payout\ Ratio \times (1+g) \times (1 - \frac{(1+g)^n}{(1+r)^n})}{r-g} + \frac{Payout\ Ratio_n \times (1+g)^n \times (1+g_n)}{(r-g_n)(1+r)^n}$ <p>(2) PEG Ratio</p> <p>Current market price per share/ EPS TTM gEPS: arithmetic average of estimated earnings per share growth rate in next 4 years</p> $PEG = \frac{Payout\ Ratio \times (1+g) \times (1 - \frac{(1+g)^n}{(1+r)^n})}{g(r-g)} + \frac{Payout\ Ratio_n \times (1+g)^n \times (1+g_n)}{g(r-g_n)(1+r)^n}$ <p>(3) PB Ratio</p> <p>Current market price per share/BV TTM</p> $P/B = (ROE - g) \times \frac{1+g}{r-g}$	<p>(4) EV/EBITDA</p> <p>Current enterprise value/EBITDA TTM</p> $\frac{EV}{EBITDA} = \frac{1-t}{WACC-g} + \frac{Depr(t)/EBITDA}{WACC-g} - \frac{CEx/EBITDA}{WACC-g} - \frac{\Delta Working\ Capital/EBITDA}{WACC-g}$ <p>(5) EV/EBIT</p> <p>Current enterprise value/EBIT TTM</p> $EV/EBIT = (1+g)(1-t) \times \frac{(1-g)/ROIC}{WACC-g}$ <p>(6) EV/Sales</p> <p>Current enterprise value/Sales TTM</p> $EV/Sales = \frac{(1+g) \times OM \times (1-t) \times (1-RIR)}{WACC-g}$

### 4.3 Median Test

<b>Table 8</b>	<b>Skechers</b>	<b>Median*</b>	<b>Mean*</b>	<b>Minimum*</b>	<b>Maximum*</b>
<b>PE</b>	<b>15.73</b>	25.93	44.99	17.43	181.02
<b>PEG</b>	<b>1.10</b>	2.36	2.97	0.91	6.34
<b>PB</b>	<b>2.39</b>	3.57	4.82	2.24	11.51
<b>EV/EBITDA</b>	<b>12.40</b>	16.51	21.17	8.98	51.83
<b>EV/EBIT</b>	<b>10.25</b>	23.64	57.5	11.04	283.93
<b>EV/Sales</b>	<b>0.96</b>	1.59	1.7	1.1	3.14

\*Calculated using comparable firms excluding Skechers

It can be seen that for all multiples, Skechers is lower comparing to the comparable companies median, and appears to be the lowest regarding PE ratio, P/Sales ratio, EV/Sales ratio and EV/EBIT Ratio. Considering that Skechers' fundamentals are moderate in the list of comparable companies, the median test may indicate that Skechers is very likely to be undervalued.

### 4.4 Choose Appropriate Multiples

#### 4.4.1 Regression Results

Below is the multiples we may consider and their corresponding possible driving factors. After several regression tests, we find the best combinations of these possible fundamental regressors, which have the highest adjusted R<sup>2</sup> to explain the multiple and compare across different multiples to find the best fit.

**Table 9 Regression Comparison**

<b>Multiple</b>	<b>Possible Regressors</b>	<b>Best Combination</b>	<b>Adjusted R<sup>2</sup></b>
<b>P/E</b>	<b>gEPS Payout Beta</b>	<b>gEPS Payout Beta</b>	<b>0.9452</b>
PEG	gEPS Payout Beta	gEPS Payout Beta	-0.1030
P/B	gEPS ROE Beta	gEPS ROE Beta	0.5536
EV/EBITDA	gRevenue ROIC Beta Tax DFR WACC	gRevenue ROIC Beta DFR	0.2376
<b>EV/EBIT</b>	<b>gRevenue ROIC Beta Tax DFR WACC</b>	<b>gRevenue ROIC Beta</b>	<b>0.6356</b>
EV/Sales	gRevenue ROIC OM Beta Tax DFR WACC	gRevenue Beta OM	0.4172



#### 4.4.2 Qualitative Thinking

1. As Skechers is in retailing sector, revenue multiples would fit our economic intuition regarding how value is measured and created the best;
2. As Skechers' depreciation is quite stable in these years, also the footwear and apparel industry is not capital intensive industry and applies similar depreciation policies across firms, EBIT may be more suitable than EBITDA;
3. As P/E ratio is affected by the firm's capital structure and distorted by non-operating items, firm multiples are more reliable to look at the firm's core operations;

Combining our intuitive thinking and regression results above, also considering our objectives, we will choose P/E ratio as a proxy for the current common stock price for investors' use and use EV/EBIT to evaluate the company's enterprise value for possible M&A, etc.

#### 4.5 Judgement on Skechers' Value

Look at both equity value and enterprise value, we are able to reach at the conclusion that Skechers is greatly undervalued and has higher financial worth than its market price.

##### 4.5.1 Equity Value

```
. regress PE gEPS payout Beta
```

Source	SS	df	MS	Number of obs = 11		
Model	24028.1339	3	8009.37797	F( 3, 7) = 58.50		
Residual	958.439877	7	136.919982	Prob > F = 0.0000		
Total	24986.5738	10	2498.65738	R-squared = 0.9616		
				Adj R-squared = 0.9452		
				Root MSE = 11.701		

PE	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
gEPS	231.9075	18.00109	12.88	0.000	189.3417	274.4733
payout	-14.33756	10.67917	-1.34	0.221	-39.58978	10.91466
Beta	-32.61821	23.19996	-1.41	0.203	-87.4774	22.24098
_cons	24.26889	22.52209	1.08	0.317	-28.98738	77.52516

PE=24.27+231.91gEPS-14.34payout ratio-32.62Beta

R-squared: 96.16% Adjusted R-squared: 94.52%

PE predicted: 35.23

PE actual: 15.73

Comment: Using regression result, controlling for growth in Earnings per share, payout ratio and risk, the predicted PE ratio for Skecher is well above the actual PE.

## 4.5.2 Firm Value

```
. regress EV_EBIT gRevenue ROIC Beta
```

Source	SS	df	MS	Number of obs = 11		
Model	51446.2064	3	17148.7355	F( 3, 7) = 6.81		
Residual	17615.1257	7	2516.44653	Prob > F = 0.0175		
Total	69061.3321	10	6906.13321	R-squared = 0.7449		
				Adj R-squared = 0.6356		
				Root MSE = 50.164		

EV_EBIT	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
gRevenue	897.545	610.6065	1.47	0.185	-546.3099	2341.4
ROIC	-274.8824	205.9853	-1.33	0.224	-761.9602	212.1954
Beta	298.3306	97.53042	3.06	0.018	67.70784	528.9535
_cons	-223.5239	98.66152	-2.27	0.058	-456.8213	9.773545

$EV/EBIT = -223.52 + 897.55gRevenue - 274.88ROIC + 298.33Beta$

R-squared: 74.49%      Adjusted R-squared: 63.56%

EV/EBIT predicted: 23.29

EV/EBIT actual: 10.25

Comment: Controlling for ROIC, expected revenue growth rate, risk, Skechers' EV/EBIT ratio is well below the predicted EV/EBIT using the regression formula. Such result may indicate that Skechers' strong core operation situation and high enterprise value compared to its current market price.

## 5. Share Price and Recommendation

### 5.1 Strong Recommendation to Buy

Current price (2018/4/27): \$ 29.08 per share

DCF recommended price: \$ 74.93 per share

Relative Valuation recommended price: \$ 65.18 per share

Which are both more than double of the current stock price, thus indicates a good opportunity to buy.

### 5.2 Risk Factors

Despite for the above recommendation, we also acknowledge there are certain risk factors which should be considered when investing:

- 1) The company faces intense competition in the footwear market. if they are unable to compete effectively with these companies or respond to fast-changing consuming preferences, its market share may decline sharply and its brand name may be harmed;
- 2) The uncertainty of global market conditions may continue to have a negative impact on its business, results of operations or financial condition, especially when considering the company is seeking for greater international expansion and the recent US tax reform;

- 3) The company's global retail business and will continue to require a substantial investment. They have also made substantial operating lease commitments for retail space worldwide, which is subject to numerous risks and uncertainties;

### 5.3 Recent Trend

It can be seen that Skechers' stock price experienced a severe drop of around 30% (from \$42 to \$ 29) from Apr 19<sup>th</sup>, when Skechers reported a balance sheet for the first quarter ended on 2018.3.31. Such drop mainly comes from a delay of its wholesale orders, which raises uncertainty regarding its 2018 sales and earnings targets. However, the latest figures in the first quarterly report of 2018 roughly align with our growth forecasting above. Moreover, such fluctuation is partly expected considering the historical performance. The company's quarterly revenues and operating results fluctuated before as a result of a variety of factors, including seasonal fluctuations in demand for footwear, delivery date delays and estimated annualized tax rate, which result in volatility of the stock price. Thus, such disappointing event further drives SKX to be a good opportunity, which is consistent with our value investing philosophy.

**Graph 2 SKX Stock Price from June 2017 to April 2018**



**Appendix I Schedule of Operating Leases**

<b>\$mm</b>	<b>Yearend 2017</b>	<b>Yearend 2016</b>	<b>Yearend 2015</b>	<b>Yearend 2014</b>	<b>Yearend 2013</b>	<b>Yearend 2012</b>
<b>2012</b>						
<b>2013</b>						109.608
<b>2014</b>					122.347	100.654
<b>2015</b>				142.695	118.289	93.697
<b>2016</b>			191.345	135.195	106.577	83.613
<b>2017</b>		191.345	179.873	120.204	89.699	68.432
<b>2018</b>	238.665	179.873	156.850	110.608	77.360	69.008
<b>2019</b>	208.292	156.850	143.309	99.389	76.612	69.008
<b>2020</b>	188.397	143.309	141.230	92.271	76.612	69.008
<b>2021</b>	167.634	141.230	109.216	92.271	76.612	69.008
<b>2022</b>	160.057	139.322	109.216	92.271	76.612	69.008
<b>2023</b>	146.516	139.322	109.216	92.271	76.612	
<b>2024</b>	146.516	139.322	109.216	92.271		
<b>2025</b>	146.516	139.322				
<b>2026</b>	146.516					

## Appendix II

	R&D Expense (\$mm)	Unamortized Portion in this year					
		2017	2016	2015	2014	2013	2012
2017	18.80	18.80					
2016	13.60	10.88	13.60				
2015	11.20	6.72	8.96	11.20			
2014	10.30	4.12	6.18	8.24	10.30		
2013	9.20	1.84	3.68	5.52	7.36	9.20	
2012	9.50	0.00	1.90	3.80	5.70	7.6	9.50
2011	15.9		0.00	3.18	6.36	9.54	12.72
2010	12.6			0.00	2.52	5.04	7.56
2009	9.3				0.00	1.86	3.72
2008	8.8					0	1.76
2007	9.2						0
Sum of Unamortized (R&D Assets)		42.36	34.32	31.94	32.24	33.24	35.26
Sum of Amortization (R&D Expense)		10.76	11.22	11.5	11.3	11.22	11.16

### Appendix III Relative Valuation Raw Data

Tickers	Market Cap \$mm	EV \$mm	PE	PEG	PB	EV/EBI TDA	EV/EBI T	EV/Sal es	gEPS*	gReven ue*	Beta	ROIC	ROE	Payout	Net Margin	Operati ng Margin	DFR	Tax Rate^	WACC
SKX	4654.4	5746.0	15.73	1.1008	2.3916	12.40	10.25	0.96	14.29%	8.65%	0.68	12.24%	0.1587	0.00%	4.30%	9.20%	1.71%	38.82%	10.42%
NKE	112114.0	110849.0	30.27	2.9474	11.5127	21.82	25.51	3.14	10.27%	6.94%	0.83	25.11%	0.3390	27.37%	12.34%	13.80%	3.28%	13.22%	9.46%
ADS	42805.6	42168.6	30.58	1.7795	6.4667	16.51	20.38	1.99	17.19%	7.42%	0.76	18.19%	0.2202	39.23%	5.17%	9.75%	2.32%	33.04%	7.51%
SHOO	2832.	2638.8	20.93	1.2380	3.5339	11.90	15.03	1.68	16.91%	5.90%	0.92	14.95%	0.1730	0.00%	7.63%	10.98%	0.00%	30.87%	9.31%
WWW	2859.4	3166.6	18.64	1.6992	3.0368	51.83	132.49	1.35	10.97%	2.36%	1.07	1.53%	0.1601	29.60%	0.01%	1.02%	20.66%	14.48%	9.85%
CROX	1091.8	1123.4	181.02	2.3633	6.6553	22.26	64.80	1.10	76.60%	1.70%	0.74	2.31%	0.0469	0.00%	1.00%	1.69%	0.00%	43.69%	10.86%
DECK	2953.	2492.5	17.43	0.9075	2.8589	8.98	11.04	1.33	19.21%	2.88%	0.96	0.87%	0.1711	0.00%	0.32%	-0.11%	1.27%	22.07%	11.51%
COLM	5921.3	5148.0	25.93	2.3400	3.5746	15.42	18.77	2.04	9.48%	7.35%	0.63	7.05%	0.1420	48.43%	4.26%	10.66%	0.00%	57.89%	10.28%
PUM	6078.2	5806.1	39.21	3.3400	3.5584	18.43	23.74	1.30	27.49%	8.99%	0.69	10.98%	0.0785	137.58%	3.28%	5.91%	0.53%	27.34%	12.09%
PVH	12358.0	14946.9	20.74	4.3400	2.2375	15.61	23.64	1.68	10.56%	4.50%	0.91	6.81%	0.1176	2.21%	6.03%	7.09%	17.00%	18.61%	9.62%
CRI	4852.3	5289.6	17.43	5.3400	5.6973	10.84	13.18	1.55	8.08%	2.97%	0.78	21.60%	0.3472	23.61%	8.90%	12.34%	10.45%	22.57%	7.45%
UAA	7301.0	7905.5	92.75	6.3400	3.9048	39.22	283.93	1.59	45.05%	8.91%	1.27	-0.78%	0.0438	0.00%	-0.97%	0.56%	8.82%	0.00%	11.78%

\*arithmetic average over next four years estimates

^effective tax rate (TTM)