The Economic Effect of Sustainability – Nike, Inc.

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Doctorate of Business Administration, anticipated 2021
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Presented at LOTS-MC on March 30, 2019
SUSTAINABLE INNOVATION IS A POWERFUL ENGINE FOR GROWTH

FY14/15 NIKE, INC.
SUSTAINABLE BUSINESS REPORT
What is Sustainability?

- Sustainability consists of the actions taken by an organization to reduce and prevent their degradation of resources.
- The term sustainability is usually reserved for issues with an environmental impact.
- Sustainability can also include other issues that affect the world around us, like human capital and labor concerns.
Company Information

• Nike, Inc. designs, develops, markets and sells athletic footwear, apparel, equipment, accessories and services worldwide.

• The company mission is “Bring inspiration and innovation to every athlete* in the world (*if you have a body, you are an athlete)”

• Overall company consists of 4 unique brand lines/businesses
2018 Company Overview

- 73,100 employees worldwide
- 452 manufacturing facilities in 30+ countries
- Retail stores – 392 in US & 790 non-US
2018 Financial Overview

REVENUE BY BRAND AND CONTINENT

- Nike North America: 41%
- Nike Europe, Middle East & Africa: 26%
- Nike Greater China: 14%
- Nike Asia Pacific & Latin America: 14%
- Nike Global Brand Divisions: 0%
- Converse Global: 5%
- Hurley North America: 0%

REVENUE BY SOURCE

- Footwear: 61%
- Apparel: 29%
- Equipment: 4%
- Other: 6%

$36.4 billion
42% US sales
58% Non-US sales
1978 established by Phil Knight and Bill Bowerman
1980 IPO of 2,000,000 shares
Mid 1990's - grown to billion dollar revenues
1997 Media scrutiny of overseas manufacturing
1998 First CR document issued
2001 First CR report issued
Company History
OUR 2020 TARGETS

We’ve set ambitious targets and measure our progress as we go.

100% renewable energy in all Nike-owned or operated facilities by 2025

ZERO footwear waste to landfill

20% reduction in freshwater use in dyeing and finishing

ZERO hazardous chemical discharge

10% reduction in our products’ environmental footprint
Research Question and Hypothesis

Whether sustainability has an economic effect on the value of the publicly traded shares of Nike, Inc.?

Hypothesis: No, sustainability does not have an economic effect on the value of the publicly traded shares of Nike, Inc.
Data Collection

• Financial data collected from Mergent, and verified with amounts reported in Nike, Inc. annual reports provided to investors for the years 1998 through 2018

• Sustainability data collected from documents and reports issued by Nike, Inc. with its annual reports or as available on its website sustainability.nike.com

• John Jowers in the Global Communications department at Nike, Inc. provided greater background and understanding of sustainability history not available online
Methodology

The average price per share for Nike, Inc. is a function of these variables:

**Financial Information**
- Revenues
- Cost of Sales
- Gross Profit Margin
- Net Income
- Diluted Earnings Per Share
- Common Stock Dividends Declared
- Return on Investment
- Total Assets
- Return on Assets
- Cash Flow from Operations
- Cash Flow per Share

**Sustainability Information**
- Number of objectives or goals reported each sustainability report
- Estimated completion towards goals each year
- Number of negative reported items each year
- Recorded in year after fiscal report issued and for all years until next report available
# Financial Regression

<table>
<thead>
<tr>
<th>Metric</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>R Square</td>
<td>99.87080939%</td>
</tr>
<tr>
<td>Degrees of Freedom</td>
<td>10</td>
</tr>
<tr>
<td>Standard Error</td>
<td>1.083381821</td>
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<tr>
<td>Confidence Level</td>
<td>95%</td>
</tr>
<tr>
<td>Critical value of t</td>
<td>2.228</td>
</tr>
<tr>
<td>F</td>
<td>632.4955133</td>
</tr>
<tr>
<td>P-value of F</td>
<td>0.000000000</td>
</tr>
</tbody>
</table>

## Coefficients

<table>
<thead>
<tr>
<th>Metric</th>
<th>Coefficients</th>
<th>Standard Error</th>
<th>t Stat</th>
<th>P-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intercept</td>
<td>165.279525988</td>
<td>16.466806087</td>
<td>10.037133195</td>
<td>0.000003470</td>
</tr>
<tr>
<td>Revenues</td>
<td>0.0000000025</td>
<td>0.000000002</td>
<td>11.392066726</td>
<td>0.000001197</td>
</tr>
<tr>
<td>Cost of Sales</td>
<td>0.0000000038</td>
<td>0.000000003</td>
<td>11.923434076</td>
<td>0.000000813</td>
</tr>
<tr>
<td>Gross Margin</td>
<td>(452.728649379)</td>
<td>48.933074740</td>
<td>(9.251996769)</td>
<td>0.000006808</td>
</tr>
<tr>
<td>Net Income</td>
<td>(0.000000062)</td>
<td>0.000000016</td>
<td>(3.826408313)</td>
<td>0.004049945</td>
</tr>
<tr>
<td>Diluted EPS</td>
<td>87.839938571</td>
<td>23.899388270</td>
<td>3.675405311</td>
<td>0.005111778</td>
</tr>
<tr>
<td>CS Divs Declared</td>
<td>33.812115625</td>
<td>19.544432719</td>
<td>1.730012639</td>
<td>0.117682715</td>
</tr>
<tr>
<td>ROI</td>
<td>72.448845487</td>
<td>15.873556219</td>
<td>4.564121895</td>
<td>0.001358247</td>
</tr>
<tr>
<td>Total Assets</td>
<td>(0.000000002)</td>
<td>0.000000001</td>
<td>(2.806172999)</td>
<td>0.020504822</td>
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<tr>
<td>ROA</td>
<td>130.555617140</td>
<td>48.099687588</td>
<td>2.714271624</td>
<td>0.023830249</td>
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<tr>
<td>CF from Ops</td>
<td>0.000000001</td>
<td>0.000000011</td>
<td>0.118618728</td>
<td>0.908182777</td>
</tr>
<tr>
<td>CF/Share</td>
<td>(7.380892726)</td>
<td>19.214607215</td>
<td>(0.384129254)</td>
<td>0.709800793</td>
</tr>
</tbody>
</table>
### Sustainability Regression

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<tr>
<td>Intercept</td>
<td>181.759183074</td>
<td>22.646504825</td>
<td>8.025926494</td>
</tr>
<tr>
<td>Revenues</td>
<td>0.000000026</td>
<td>0.000000003</td>
<td>10.330818674</td>
</tr>
<tr>
<td>Cost of Sales</td>
<td>0.000000041</td>
<td>0.000000004</td>
<td>10.802728149</td>
</tr>
<tr>
<td>Gross Margin</td>
<td>(496.220105151)</td>
<td>68.696806227</td>
<td>(7.22335878)</td>
</tr>
<tr>
<td>Net Income</td>
<td>(0.000000062)</td>
<td>0.000000018</td>
<td>(3.439681967)</td>
</tr>
<tr>
<td>Diluted EPS</td>
<td>86.688342317</td>
<td>26.353271637</td>
<td>3.289471740</td>
</tr>
<tr>
<td>CS Divs Declared</td>
<td>38.674655395</td>
<td>24.251235385</td>
<td>1.594749908</td>
</tr>
<tr>
<td>ROI</td>
<td>72.030748994</td>
<td>18.611697450</td>
<td>3.870186972</td>
</tr>
<tr>
<td>Total Assets</td>
<td>(0.000000002)</td>
<td>0.000000001</td>
<td>(2.627301073)</td>
</tr>
<tr>
<td>ROA</td>
<td>142.785544288</td>
<td>58.113127320</td>
<td>2.457027368</td>
</tr>
<tr>
<td>CF from Ops</td>
<td>0.000000002</td>
<td>0.000000013</td>
<td>0.134719753</td>
</tr>
<tr>
<td>CF/Share</td>
<td>(8.539134399)</td>
<td>22.923463384</td>
<td>(0.372506294)</td>
</tr>
<tr>
<td>No. of Factors</td>
<td>0.052044138</td>
<td>0.099017818</td>
<td>0.525603770</td>
</tr>
<tr>
<td>Est. Completion</td>
<td>2.097682908</td>
<td>7.216907298</td>
<td>0.290662305</td>
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<tr>
<td>No. of Negative Items</td>
<td>0.184835836</td>
<td>0.279733992</td>
<td>0.660755721</td>
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Results Comparison

Financial

• Identified 98.87% of independent variables
• CF from Ops and CF/share look less statistically significant than other factors
• The statistical significance of overall equation stronger without sustainability factors

Sustainability

• Identified 99.91% of independent variables
• CF from Ops and CF/share still look less statistically significant, which is unchanged
• Sustainability factors look less statistically significant than most financial factors and they had higher standard errors and t-stats which indicates a possible concern with their inclusion in the equation

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Analysis

• The F-factor and the p-value of F indicate that sustainability is a factor, albeit small, in the value of the share price of Nike, Inc.

• The standard errors and t-stats of the sustainability factors indicate that they are more likely than not accounted for already as part of the financial data.

• The results indicate that investors consider sustainability information, but they consider it part of the financial data as sustainability is expected to be part of business.

• This is consistent with what Nike implies in their sustainability reports that sustainability is a part of business and is already considered as part of the financial data.
Conclusion

• Sustainability as part of business is an expectation of current investors
• Sustainable innovation has brought products on which business is based upon today:
  • DriFit – a seamless, cooling fabric that was developed for water conservation efforts and creates less waste through its manufacturing processes
  • Flyleather – a lightweight engineered leather that is more durable, uses less water in manufacturing and has a lower carbon footprint
  • Flyknit – a method of making flexible knit shoes that is virtually zero waste
• Investors recognize these advancements of sustainable innovation and are willing to pay the market price for publicly traded shares of Nike, Inc.
Thank you!

And a special thank you to Dr. Negbenebor, Dr. Caudill, John Jowers, Global Communications at Nike, Inc., and Sarah Curry.

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