HAAS SOCIALLY RESPONSIBLE INVESTMENT FUND

Annual Report
May 2018
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HSRIF 2017-2018 Annual Letter from the Faculty Advisor

The 2017-2018 academic year marked the tenth anniversary since the HSRIF was established as the first and largest student-led SRI fund within a leading business school. Ten years after its founding with initial donations exceeding $1 million, as the result of strong investment returns and donor support, the HSRIF now exceeds $3 million. The HSRIF has provided over $383,000 in cumulative support to the Center for Responsible Business (CRB) budget, and ten years of HSRIF alumni have gone on to serve in influential investment industry roles.

HSRIF 10 Year Retrospective

The founding documents of the HSRIF show that the fund aspires to be innovative: “The Fund is a mechanism to generate new ideas that will ultimately contribute to the field of Socially Responsible Investing.” The fund principals are urged to reject conventionality and pursue “creative thinking”. That creates both an opportunity and a challenge, as the objectives of creativity, innovation and experimentation need to be balanced with the responsibility and risks inherent in fund management.

Since 2016, the fund has evolved from a pure stock-picking fund to a diversified endowment portfolio, with deliberate asset allocation and risk analysis. The curriculum has evolved to include investment and ESG fundamentals including year 1 prerequisite classes, all underscored by an approach of bottom-up fundamental stock and business analysis. The evolution of the HSRIF is profiled in annual reports published since its inception:

https://responsiblebusiness.haas.berkeley.edu/curriculum/hsrif.html

2017-2018 Key Milestones

- **Investment Beliefs:** The Principals formalized a statement of Investment Beliefs. The statement draws directly from the Haas Defining Principles: Beyond Yourself, Question the Status Quo, Confidence Without Attitude, and Students Always. It is fitting that the Principals were inspired to craft this statement during Dean Lyons’ final term as Dean.

- **Asset Allocation and Risk Management:** The Principals further evolved the portfolio exposure to diversified equity ESG portfolios including a low cost ETF strategy, and a proven active portfolio manager (with strong Berkeley ties) via a ‘40 Act mutual fund.

- **Engaged Ownership & Stewardship:** The Principals demonstrated that ESG integration is more than analyzing securities and passively owning equities, and practiced an engaged ownership stewardship approach through signing on to a public letter to shareholders.

- **Investment Performance and Risk Analysis:** The portfolio delivered strong returns, driven by stock selection in the Principals’ focused equity
portfolio, while benefitting from the active selection of and allocation to diversified funds which reduced overall stock-specific risk.

**Applied ESG Integration & Investment Management**

Sound “sustainable investing” must first be sound investing, and a combination of practitioner and theoretical knowledge are important components to a curriculum for students in the area of sustainable finance. A curriculum has been developed to support the HSRIF Principals’ role as asset owners and fiduciaries. The following HSRIF Objectives were set forth in the 2016-2017 Annual Report:

1. Investment Framework & Philosophy
2. Corporate Reporting, Accounting & Communication
3. Governance: Owner Rights and Accountability to Stakeholders
5. Asset Owner Objectives

**Guest Lecturers**

We are grateful for the expert insights of our guest lecturers including:

- Professor Dorothee Baumann-Pauly, NYU Stern Center for Business and Human Rights
- Professor Bob Eccles, Oxford
- Janine Guillot, Sustainable Accounting Standards Board (SASB)
- Tim Mohin, Global Reporting Initiative (GRI)
- Nancy Pfund, Double Bottom Line (DBL) Ventures
- Anne Simpson, CalPERS
- Wendy Walker, Cambridge Associates

**Acknowledgements**

Thank you to all of the above guest lecturers, the HSRIF Advisory Committee & the CRB, the HSRIF Principals for their commitment to advancing the fund, and our class assistants Kyriaki Papadimitriou and Katie Chiou. And a special thank you to the founding donors who ten years ago, through their vision and support, enabled the creation of the HSRIF. In those ten years, relevance and interest in sustainable investing has increased dramatically, providing Haas and HSRIF alumni with an increased opportunity to positively influence and lead the field.

Dan Hanson

Faculty Advisor, HSRIF 2017-2018
1. Introduction

The Haas Socially Responsible Investment Fund (HSRIF), now in its tenth year of existence, was the first and largest student-led Socially Responsible Investment (SRI) fund within a leading business school. It offers MBA students real-world investing experience delivering both financial returns and environmental, social and governance (ESG) impact. Under the Principals’ management (together with generous gifts from alumni and ongoing crowdfunding donations), the fund has more than tripled from its initial size to over three million dollars.

The HSRIF also functions as an endowment for the Center for Responsible Business at Berkeley-Haas and principals are expected to approach the management of the fund through a lens of fiduciary duty to the Center. Since inception, the fund has supported the CRB with a total of $383,000, including $103,000 for 2018.

Performance for the 2017-18 academic year was very solid, with the overall portfolio returning 14.8% in the year and the equities sub-portfolio up 21.1% in the same period. This compares to 13.6% for the Russell 3000 and 11% for an 80% Russell 3000 / 20% Barclays Aggregate portfolio.

For the 2017-2018 academic year, HSRIF continued to focus on maintaining a strong portfolio through both financial and ESG lenses. With the guidance of faculty advisor Dan Hanson, the Class of 2018 Principals have, among other initiatives, also taken the opportunity to further standardize the fund’s management practices, explore new avenues for diversification of the fund and adopt a set of investment beliefs based on the Berkeley Haas defining principles. The Class of 2018 Principals are hopeful that these and other projects developed during the academic year will also continue to be helpful for future stewards of the fund.

The Principals are grateful for the continued support from the Center for Responsible Business (CRB) and the HSRIF Investment Advisory Committee. The Class of 2018 Principals wish the next class and Professor Hanson the best of luck ahead in tackling challenges associated with the HSRIF’s mission in achieving both financial and ESG returns.
2. Portfolio performance

2.1 Overall portfolio

As of 04/27/2018 the HSRIF’s overall portfolio had 41.8% of assets allocated to individual equities, 39.6% to the MSCI KLD 400 Social ETF, 14.7% to the TIAA-CREF Social Choice Bond Fund, and 3.9% to cash and short-term Treasuries.

On the year up to 04/27/2018, the overall Fund’s returns were up 14.8%, with a standard deviation of 9.9%, leading to a Sharpe ratio of 1.43. This compares to a return of 11% and standard deviation of 9.7% for a benchmark portfolio composed of 80% Russell 3000 and 20% the Barclays US Aggregate bond index. Below are other benchmarks for comparison.

<table>
<thead>
<tr>
<th>Overall performance portfolio versus benchmarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Year Performance</td>
</tr>
<tr>
<td>HSRIF</td>
</tr>
<tr>
<td>80% R3000/ 20% B-Agg</td>
</tr>
<tr>
<td>80% S&amp;P/ 20 % B-Agg</td>
</tr>
<tr>
<td>80% KLD/ 20% TIAA-CREF</td>
</tr>
</tbody>
</table>

HSRIF performance versus 80/20 benchmarks
Returns by broad fund components were 21% for the concentrated equities portfolio, 14% for the KLD E.T.F., 0.35% for the TIAA-CREF Social Choice bond fund, and -0.37% for the Schwab short-term US Treasuries fund.

Sector allocation, for the whole portfolio (and disaggregating the indices into their component securities) shows that the HSRIF was broadly overweight in the Consumer Discretionary (by 5.3%), Information Technology (4.2%) and Industrials (1%) versus a Russell 3000/ Barclays Aggregate benchmark. HSRIF was underweight Financials (by 2.6%), Energy (2.4%) and Mortgages (1.6%). The table below shows a more detailed average under/overweighting by sector for the period and average weights of the whole portfolio by sector.

<table>
<thead>
<tr>
<th>Sector</th>
<th>Weight</th>
<th>Under/over</th>
</tr>
</thead>
<tbody>
<tr>
<td>Information Technology</td>
<td>23.1</td>
<td>4.2</td>
</tr>
<tr>
<td>Consumer Discretionary</td>
<td>15.9</td>
<td>5.34</td>
</tr>
<tr>
<td>Bonds</td>
<td>11.8</td>
<td>2.12</td>
</tr>
<tr>
<td>Health Care</td>
<td>10.5</td>
<td>-1.2</td>
</tr>
<tr>
<td>Industrials</td>
<td>10.1</td>
<td>0.99</td>
</tr>
<tr>
<td>Financials</td>
<td>8.5</td>
<td>-5.11</td>
</tr>
<tr>
<td>Consumer Staples</td>
<td>6.0</td>
<td>-0.08</td>
</tr>
<tr>
<td>Utilities</td>
<td>3.7</td>
<td>0.95</td>
</tr>
<tr>
<td>Mortgages</td>
<td>2.6</td>
<td>-2.04</td>
</tr>
<tr>
<td>Energy</td>
<td>2.2</td>
<td>-2.61</td>
</tr>
<tr>
<td>Real Estate</td>
<td>1.7</td>
<td>-1.48</td>
</tr>
<tr>
<td>Cash</td>
<td>1.4</td>
<td>1.4</td>
</tr>
<tr>
<td>Materials</td>
<td>1.3</td>
<td>-1.59</td>
</tr>
<tr>
<td>Telecommunication</td>
<td>1.1</td>
<td>-0.63</td>
</tr>
</tbody>
</table>

A returns attribution analysis shows on aggregate that the fund’s 3.81% outperformance in the period came mostly from stock selection within sectors (3.4%) rather than under/overweighting sectors (0.4%). As a whole, the main contributors to the performance were attributable to weighting decisions within the IT sector (2.9%), where our largest contributions (accounting also for implicit holdings via the KLD index) came from First Solar (1.45%, overweight +1.82), Mastercard (0.6%, +2.9) and Microsoft (0.5%, +3.5). The biggest drag on performance came from selection within the Consumer Discretionary sector. The absence of Amazon in the portfolio dragged returns by 1% (underweight -1.4) when compared to the benchmark. Our positions in Disney (-0.71%, +2.41) and Starbucks (-0.42%, +2.12) were also significant drags. Below is a table attributing returns for the 1-year period up to 04/27/2018.
Concentrated Equities Portfolio

The sub-portfolio of equities directly held by the HSRIF returned 21.1% in the period compared to 13.6% for the Russell 3000, 14.3% for the S&P, and 14.5% for the MSCI KLD Index. This led to a Sharpe ratio of 1.71 for the period.

Equity holdings for the 2017-18 academic year

<table>
<thead>
<tr>
<th>Name</th>
<th>Equities sub-portfolio</th>
<th>% of HSRIF assets (incl. index)</th>
</tr>
</thead>
<tbody>
<tr>
<td>AMN Healthcare</td>
<td>9.22</td>
<td>3.87</td>
</tr>
<tr>
<td>Mastercard</td>
<td>8.89</td>
<td>3.72</td>
</tr>
<tr>
<td>Microsoft</td>
<td>8.37</td>
<td>6.00</td>
</tr>
<tr>
<td>Bright Horizons</td>
<td>7.19</td>
<td>3.01</td>
</tr>
<tr>
<td>Prudential</td>
<td>7.13</td>
<td>3.15</td>
</tr>
<tr>
<td>Alphabet</td>
<td>6.48</td>
<td>3.81</td>
</tr>
<tr>
<td>Toyota</td>
<td>6.30</td>
<td>2.64</td>
</tr>
<tr>
<td>Canadian National Railway</td>
<td>6.06</td>
<td>2.54</td>
</tr>
<tr>
<td>Unilever</td>
<td>6.05</td>
<td>2.53</td>
</tr>
<tr>
<td>American Water Works</td>
<td>5.99</td>
<td>2.56</td>
</tr>
<tr>
<td>First Solar</td>
<td>5.89</td>
<td>2.47</td>
</tr>
<tr>
<td>Southwest Airlines</td>
<td>5.84</td>
<td>2.48</td>
</tr>
<tr>
<td>Gilead</td>
<td>5.59</td>
<td>2.69</td>
</tr>
<tr>
<td>Walt Disney</td>
<td>4.86</td>
<td>2.57</td>
</tr>
<tr>
<td>Starbucks</td>
<td>4.63</td>
<td>2.23</td>
</tr>
<tr>
<td>Hanes Brands</td>
<td>1.50</td>
<td>0.65</td>
</tr>
</tbody>
</table>
Sector allocation, for the equities portfolio shows that it was overweight in the Consumer Discretionary (13.25%), Information Technology (4.35%) and Utilities (3.15%) sectors versus the Russell 3000 benchmark. The HSRIF had no allocations to the Energy, Real Estate, Materials and Telecommunications sectors. It was also underweight Financials (by 7.1%), Industrials (-0.9%) and Consumer Staples (-0.6%) sectors. The table below shows a more detailed average under/overweighting by sector for the period and average weights of the whole portfolio by sector.

A returns attribution analysis shows on aggregate that the fund’s 7.54% outperformance in the period came mostly from stock selection within sectors (6.4%) rather than under/overweighting sectors (1.1%). As a whole, the main contributors to the performance were attributable to weighting decisions within the IT sector (6.1%), where our largest contributions came from First Solar (3.65%, overweight +4.44), Mastercard (1.67%, +7.49) and Microsoft (0.8%, +5.34).

<table>
<thead>
<tr>
<th>Sector allocation vs R3000</th>
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<tbody>
<tr>
<td><strong>Weight</strong></td>
</tr>
<tr>
<td>Information Technology</td>
</tr>
<tr>
<td>Consumer Discretionary</td>
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<tr>
<td>Health Care</td>
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</table>
The HSRIF has generally underperformed the Russell 3000 (ending the year on April 30th), with this being the case in 6 out of 9 years for which we have data. Yearly returns have on average been 5.7% below the benchmark (though excluding 2010, this goes down to 2.6%).

When looking at realized Sharpe ratios for the same periods, the fund’s performance looks much better, with a higher Sharpe in 5 out of 9 years, though with an average of 1.20 versus 1.26 for the Russell 3000. In particular, if we exclude the 2018 results, we see an average of 1.17 for the HSRIF versus 1.29 for our benchmark.
Given that one of the HSRIF’s objectives is maximizing risk-adjusted returns, the Class of 2018 Principals very much agree with the last cohort’s decision to diversify the fund’s holdings by buying equity and bond ETFs. We have also moved to further diversify holdings to avoid excessive concentration of risk, while aiming to keep solid returns.

### 2.4 Contribution to the CRB

Since inception, the Haas Socially Responsible Investment Fund has contributed $383,000 dollars to help fund activities of the CRB. In particular, steady growth in HSRIF assets has allowed for contributions to grow more than 40% in the last four years.

<table>
<thead>
<tr>
<th>Contributions to the CRB</th>
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<tbody>
<tr>
<td>2018</td>
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<tr>
<td>2017</td>
</tr>
<tr>
<td>2016</td>
</tr>
<tr>
<td>2015</td>
</tr>
<tr>
<td>2013</td>
</tr>
<tr>
<td><strong>Total</strong></td>
</tr>
</tbody>
</table>
3. Description & Rationale for Rebalancing decisions

At the end of April, the Class of 2018 Principals voted on four large rebalancing decisions. First, we sold our KLD 400 holdings and allocated most of them to the Vanguard FTSE Social Index (32.5% of the fund’s assets) and a smaller portion to the Parnassus Endeavor Fund (7.5%). Second, we added a relatively small position to Facebook stock at 1% of total fund assets. Third, we increased our Hanes Brands position from about 0.6% of fund assets to 1.8%. Lastly, we reduced our current Mastercard position from 3.8% of assets to 1.6%, while adding positions in Visa (1.8%), PayPal (1.3%) and Square (0.75%).

We also readjusted some of the existing positions to smaller extents to reflect conviction levels and price movements.

3.1 Reassessing the KLD 400

An HSRIF team undertook an analysis of the available passive index fund market to assess how HSRIF’s position in the KLD 400 stacked up against alternatives. Pushback around the KLD in our class was mainly due to the 50 bps fee for a passive index fund. To start our analysis, we thought back to why HSRIF invested in a passive index in the first place and arrived at three reasons it's important to HSRIF to invest in an ESG index fund:

- We want broad financial diversification and financial returns that are ESG-forward.
- We want a low-maintenance strategy so we can focus on other pressing ESG questions.
- We want to understand how other ESG managers are making investment decisions to inform our own management approach.

Given these driving principles for ESG index exposure, we then undertook an assessment of what other funds would give us access to financial exposure. We focused on three main areas: long-term track record, fees, and ESG characteristics. Through this exercise we identified the KLD as having higher fees and a worse track record than other index fund options that would give us similar diversified ESG exposure. Specifically, the Vanguard FTSE Social Index had the highest 10-year return for the lowest fees. Given the similar profile as the KLD, albeit with a better track record and much lower fees - the HSRIF Principals decided to replace the KLD exposure with primarily with the Vanguard FTSE Social Index.
Our ETF analysis also highlighted Parnassus Endeavor Fund, an actively managed concentrated fund that boasts the highest 10-year returns of any ESG-focused fund. Those impressive returns came with another pro - a tried and true commitment to ESG principles that aligned with HSRIF's mission. The con for Parnassus fund was higher fees. After much discussion, the Principals concluded that it was worth paying more for exposure to a leader in the ESG active management space. Involvement in the Parnassus Endeavor fund would be positive from a financial standpoint, an ESG standpoint, and also from a learning standpoint as students would be monitoring one of the leaders in ESG management.

The 2018 Principals determined to reduce the overall fees for the ETF positions that we would weight more heavily to the Vanguard fund rather than the Parnassus fund. By having 90% of total ETF position in the Vanguard fund (22 bps) and 10% in the Parnassus fund (95 bps), the resulting fee is about 30 bps, lower than currently paid on the KLD, with a stronger performance track record, and educational benefits of holding an ETF ESG leader.

### 3.2 Addition of Facebook

The Principals voted on adding a position on Facebook Inc., amounting to 2.4% of the HSRIF’s assets (1.4% indirectly, 1% directly). The decision was due to its strong competitive advantage due to network effects of its userbase and attractive valuation. Main reservations were around the company’s ESG evaluation, in particular the Governance aspect. Principals ultimately decided that adding the position would make sense under the light of making selections on the basis of an improving performance on ESG aspects. In particular, the HSRIF participated as a co-signer in an open letter to the CEOs of Facebook’s largest institutional shareholders calling for action on content governance, risk oversight committees, disclosures on handling of personal data and an increase in independent directors.
3.3 Increase in Hanes Position

The increase in the Hanes position was based predominantly on two factors. On a financial returns side, HBI has one of the lowest cost positions in replenishment-driven product categories and brand conscious consumer products. Strong acquisition platform and track record. ‘Bottom of cycle’ conditions also make it attractive to buy now. On the ESG side, generally strong performance on material issues – major innovations in water, energy, carbon and waste reduction relative to publicly stated goals (between 20 and 40% reductions since 2007, with further goals set for 2020). ESG improvement opportunity is in transitioning away from cotton as key fabric (85% currently), increasing board diversity (2 of 11 directors women) and preparing for more stringent chemical reporting standards (though they currently surpass these).

3.4 Decrease in Mastercard Position

MasterCard has been a fantastic performer for the portfolio with over 130% return since establishing the position in 2014. The investment thesis focused on the company’s efforts in promoting financial inclusion globally through access to debit and credit cards. Reassessing those merits today, we do not observe a drastic difference in MasterCard’s offering versus that of its competitors. In fact, questions arose about the company’s efforts to truly include financial participants globally while credit cards offered on its platform charge an APR of 25%, a figure as high as some payday loans.

An expected increase in global payments bodes well for long term growth prospects for Mastercard and the industry as a whole. However, a critique of consensus estimates is that the possibility of severe disruption to the company’s business model is not fully taken into consideration. With that in mind, diversifying our position into competitors such as Visa, PayPal and Square presented an interesting opportunity to remain exposed to technology payment companies while gaining exposure to additional mission driven initiatives. Given expressed concerns around valuations and multiples, we targeted the following position allocation: Mastercard: 100 basis points; Visa: 100 basis points; PayPal: 100 basis points; Square: 75 basis points.
4. Description & Results of Strategic Projects

4.1 Investment Beliefs & ESG Approach

Ten Years of Standing for What We Believe In

This year, the Haas Socially Responsible Investment Fund marked a decade of student-led socially responsible investing. As we look forward to the next ten years, we wanted to ensure that the Fund continued to be a vehicle not only through which students could learn about the principles of socially responsible investing, but that would also be an outward example to the business world of the Berkeley Haas values. Learning from the journey of other leaders in ESG and fund management, the HSRIF undertook the process of clarifying the components of our Investment Beliefs that will stand as a guide for future HSRIF Principals.

Our Investment Beliefs draw directly from the values of a Berkeley Haas Leader and the four Defining Principles that are so thoroughly engrained in the students who are educated here at Haas: Beyond Yourself, Question the Status Quo, Confidence Without Attitude, and Students Always.

Investment Beliefs

- **Fundamental approach, with ESG qualifier**
  
  Fundamental analysis is used to uncover the value of each investment for both learning and prudence purposes. Invest only in companies that are good or high potential to improve from an ESG perspective. Regardless the financial return, HSRIF will not consider a business with poor ESG performance due to the belief that ESG factors drive long term value as a “high quality” company.

- **Intermediate time horizon**
  
  To avoid the impairment of perpetual value, the investment is made on securities that have upside in a longer term, offset by the fact that new class of principals will come aboard to reevaluate the portfolio each year. A typical investment analysis time horizon is around 2-3 years, although the fund typically is a longer term holder of high quality equities.

- **Beyond Yourself**
  
  We believe that companies should be accountable to a wide set of stakeholders - from their overseas employees to their end consumer - and have a strong commitment to human rights of all people. As an institution, we have a rich history of supporting Anti-apartheid and Free Speech movements, and in advocating for the rights of the underrepresented and disadvantaged. As a fund, we commit to investing in companies that go “beyond themselves” to integrate a wider group of stakeholders into their management beliefs. (e.g. Starbucks)
**Question the Status Quo**

Prevailing economic theory has done little to incorporate environmental externalities into the valuation of companies. At HSRIF, we question this stance, believing firmly that incorporating analysis of the environmental effect of a company’s activity is a more accurate assessment of the holding’s long-term value. Through our portfolio of holdings, the HSRIF seeks to advance Berkeley’s tradition of climate justice by supporting companies that minimize humans’ effect on natural resources. (E.g. Canadian National Railway)

**Confidence Without Attitude**

Company leadership should be strong and inclusive, whether this is in the form of participatory voting rights, or a true commitment to diversity and representation at senior levels on boards. With strong governance and leaders that embody “confidence without attitude” we believe companies will not only hold themselves to more ethical standards, but also perform better financially. As the HSRIF, we invest in companies that have governance models that allow for participation, diversity, and responsibility. (E.g. Unilever).

**Students Always**

We are always learning, and we expect the companies we invest in to be as well. As investors, we look for companies that are actively managing their ESG and continually looking to improve the long-term viability and impact of their company. We take an activist role in companies that have improvements to make in ESG, but which are committed and open about their path to doing so. (E.g. Facebook)

**Fund Diversification across Asset Classes**

To provide downside protection, liquidity to fund the 4% CRB draw (based on past 20 quarter average portfolio value) and reflect that there are periods where it is harder to actively manage the portfolio (reflecting the nuances of the student calendar), the fund will be diversified between Fixed Income (ranging from 10% to 40% of the overall fund) and equity (remaining 90% to 60%), with the equity portion split roughly 50:50 between the individual equities portion of the portfolio and passive equity indices.

### 4.2 Idea Generation

The Idea Generation team endeavored to synthesize the methodology with which we source, analyze and action new "ideas" for the HSRIF to action. This evolved into a broader discussion about the principles upon which we invest. Working closely with the Investment Beliefs team who was
responsible for developing an HSRIF mission statement, we iterated a strategy based on the Haas Defining Principles with the goal of aligning all of our investments with one of the Principles.

In particular, this strategy focused on how to approach passive versus active investments and whether we will apply a different lens to each (i.e. investing actively in an emerging innovator in ESG and passively investing in an industry leader with relatively high ESG scores). Ultimately, we have drafted a set of procedures that incorporates both process (e.g. Bloomberg) and philosophy (e.g. mission statement) elements.

4.3 Onboarding of New Principals

The opportunity to be a HSRIF Principal draws students from a wide variety of professional backgrounds. In 2016, the fund’s leadership introduced two prerequisite courses for running the fund, Asset Management and Social Investing, to better prepare students for the financial and social impact analysis and theory core to the responsibilities of being a Principal. This past year, we took stock of this training for the Incoming Principals and identified two areas of needed improvement. Through the two workshops outlined below we aimed to supplement students’ coursework and facilitate a smooth transition between principal groups.

Discounted Cash Flow Workshop

Incoming Principal, Jake Wamala, led a DCF workshop for his classmates on April 6th, 2018. The goal of the workshop was to provide an introduction or refresher to this fundamental analysis tool given that all HSRIF Principals are expected to be able to build their own model for the fund’s positions and potential investments. The topic of discounted cash flows is only a small part of Core Finance at Haas and so it was critical that there be an opportunity to focus on learning this important skill, especially for those new to finance.

HSRIF ESG Workshop

Lloyd Kurtz generously offered up class time in his Social Investing course on May 1st, 2018 so that HSRIF Principals could orient the Incoming Principals to the fund’s investment philosophy and approach to ESG. The workshop had two major goals. The first goal of the lecture was to demonstrate how social investing theory is applied in the real world, specifically to HSRIF. The second goal was to smooth the transition for the Incoming Principals by making them more familiar with our current positions, specifically why we chose to make an investment on ESG grounds, what investment principle each position embodies, and the key
risks and opportunities for the company’s social impact performance going forward.

Output

As a final output of the workshops above, the Incoming Principals had the option of devoting their final project in Professor Kurtz’s course to a subject of importance to HSRIF and one that would serve to deepen the Principals’ preparation for taking over the fund in May. The options were:

- Apply the ESG framework to a current position or a company you would like to pitch in the fall. Make sure to include a fundamental analysis of the business as well.
- Identify a major ESG issue within a company in the portfolio, make a social and business case for why it needs to be addressed, and write a draft shareholder letter to the board.

These final reports will be shared with the Incoming Principals and will serve as the basis for class discussion in the beginning of the Fall 2018 Semester.

5. Recommendations and comments to the Next Class of Principals

Many of the current positions and topics discussed by the outgoing Principals are considered to be still ongoing and no clear consensus had been reached by the end of the year. As a suggestion for the incoming class, the outgoing Principals would like to highlight a few discussions that are worth continuing into the next year.

Facebook: evaluate if comfortable with ESG situation. Maybe discuss a more ‘activist’ approach?

Parnassus: fees are relatively high. Does it make sense to have an actively managed fund given that 40% of the portfolio already is along those lines?

BFAM: There is very little to dig into for ESG. MSCI guest speaker detail (we don’t have account) is saved. There is potential to ask for more disclosure! Also, they are doing a second offering in May 10, 2018 -- could be interesting to discuss the implications on the stock.

Hanes: Continue to monitor operating margins and look for improvement resulting from improved synergies with acquired portfolio brands. Consider shareholder letter to address non-cotton material adoption (currently at least 80% of product made with cotton). In addition, pay close attention to direct-to-consumer strategy in face of industry shifts (i.e. online).

MasterCard divestments into V, PYPL, SQ.
MSFT: Continue to monitor the financial health of the traditional MSFT business. Cloud/Azure is the growth engine but Windows, Office, Server is what’s paying the bills. If those erode too quickly, they limit the ability of Microsoft to pivot. Additionally, MSFT has recently had news of sexual harassment/misconduct litigation. Monitor these as they proceed and see what actions they are taking to ensure worker safety.

AMN Healthcare: Continue to monitor their growth. Based on DCF and Multiples valuation, AMN is trading near its fair value/target price. This means we may find better returns elsewhere. Equally important, AMN does not have great ESG reporting/transparency. If HSRIF is going to continue holding, it is worthwhile to take an activist position and ask them to begin providing greater disclosure.
6. Holding Company Evaluations

6.1 Alphabet, Inc.

Stock Name: Alphabet Inc Class A (GOOGL)
Principal: Samantha Penabad
Investment Principle: Student Always

Business Description

Google is an American multinational technology company specializing in Internet-related services and products. These include online advertising technologies, search, cloud computing, software, and hardware.

Alphabet is divided into two main parts:

Google: where Google Maps, search, chrome, Nest and YouTube falls under.

Other:

- Access: Includes Google Fiber, dedicated to expanding internet services
- Calico: invests in human life fights age related disease
- Chronicle: tools for businesses to prevent cybercrime on their platforms
- DeepMind: Artificial Intelligence technology
- Google Ventures and Capital G: funding new bold ideas, and late stage ventures (respectively)
- Jigsaw: an incubator within Alphabet that builds technology to tackle some issues of censorship, global security, and online harassment.
- Sidewalk Labs: dedicated to using technology to improve urban innovation
- Verily: research devoted to life sciences
- Google X: trying to find the next big thing (big breakthrough)
- Waymo: autonomous car company

Business Analysis

“A company this big, has never grown this fast.”

Alphabet is a giant, fast growing, tech company. It has 111B USD in Revenue and as of 2017. It’s largest holding is Google, which has business across 5 lines: Search, Advertising, Consumer Products, Business Platforms, and Hardware. Despite its many bets (such as Google Cloud Services and Pixel phone), Google still gets 90% of its sales from advertising—both performance advertising on its owned-and-operated sites, including its search engine, Gmail, and YouTube, as well as helping brands advertise
through world-class ad technology and two-sided platforms that connected buyers and sellers of advertisements. Google dominates digital advertising market with closest competitor being Facebook.

Alphabet’s main, holding, Google has a strong moat, in that it is has strong ‘ingrainedness’, with people using the word “Google” as a synonym for searching the web. Google also benefits from network effects, which it has strategically developed, particularly in the ad space - on both the buy and sell side, Google has large reach. Its B2B products such as Google Cloud Services and various advertising platforms have high switching costs. Alphabet benefits from large amounts of data which it is able to use to provide better services and win out against competitors. Across Alphabet, Google relies on strong intellectual property laws to protect its value. The company believes its strong culture and investment in employees enable to retain and grow talent.

We believe Alphabet has a bright future, as it has invested heavily in Machine Learning and Artificial Intelligence. The company outperforms its competitors in these new technologies. Alphabet also invests heavily in "moonshots" and notes in their most recent 10-K, “we will not shy away from high-risk, high-reward projects that we believe in because they are the key to our long-term success.” Finally, the company succeeds as the internet continues to reach more people, more quickly, with less friction. Google’s many services contribute to their overall strategy of growing the number of individuals online. Threats to Google include quickly innovating start-ups, decreasing spend from advertisers, new devices and modalities for accessing the internet, and increased government scrutiny in the technology industry.

Alphabet has a Return on Capital Employed of 17.96%, which falls about the 15% suggested target.

ESG Analysis

Alphabet is categorized as “Beyond Yourself” given the Google’s mission to improve access to information, and the outsized number of research and innovation projects dedicated to improving the lives of stakeholders through protection of human rights, advancements in life sciences, and investment in urban technology, among others. Alphabet’s ESG scores are relatively high in the categories most relevant for tech companies:
Although mostly performing well in these categories, Alphabet has a dual class share policy and Governance that may cause concern. After discussion, the HSRIF believes that the structure right now does not pose outsized risk, given the strength of leadership, and the company’s track record in making good decisions with investment capital.

### Valuation

- Enterprise Value / Operating Income: 27.7
- PE Ratio: 43.3 (FB: 29.10 MSFT: 63.90)

<table>
<thead>
<tr>
<th>Category</th>
<th>Comments</th>
<th>Score</th>
</tr>
</thead>
</table>
| Energy Management, Waste & Water Management | **Google calls out climate change as a key risk to business. Their focus on the effort, and understanding of how it impacts business operations indicates strong Environmental stewardship.**  
**Standards** (Data centers use less than 50% industry average). **Innovation** (ML to reduce energy consumption, Google X)                                                                                                                                                                                                                                                                                                                                 | Between 9.1-10 |
| Data Security & Customer Privacy | **Alphabet has access to large amounts of personally identifiable information (PII). Focus on use of data has increased with the inquiries surrounding the company’s key competitor in the advertising space, Facebook.**                                                                                                                                                                                                                                                                  | 5.7 in MSCI "moderate" controversies |
| Diversity & Inclusion Recruitment, Development, Retention | **This year was a tumultuous one for Google, with both the “Google Memo” and the “Equal Pay Case.” However, the HSRIF believes that strong leadership and governance has helped Google continue to improve in this domain; The company released numbers and has plan to address.**                                                                                                                                                                                                                                   | 6.1 on both HCD and Labor Mgmt. "moderate" controversies |
| Competitive Behavior | **This year, Google was sued for anticompetitive behavior in Europe: search, shopping, hotels, flights. 2.4B USD fine levied in Europe**                                                                                                                                                                                                                                                                                                                                                               | 3.7/10 in MSCI "moderate" controversies |
6.2 AMN Healthcare Services

Stock Name: AMN Healthcare Services, Inc. (AMN)
Principal: Robert Gutierrez
Investment Principle: Beyond Yourself

Business Description

AMN Healthcare is the innovator in healthcare workforce solutions and staffing services to healthcare facilities across the nation. AMN Healthcare workforce solutions – including managed services programs, vendor management systems and recruitment process outsourcing – enable providers to successfully reduce complexity, increase efficiency and improve patient outcomes within the rapidly evolving healthcare environment. The Company provides unparalleled access to the largest network of quality clinicians and physicians through its innovative recruitment strategies and breadth of career opportunities. Clients include acute-care hospitals, government facilities, community health centers and clinics, physician practice groups and many other healthcare settings.

Business Analysis

Growth strategy

- The company already has over 100 of these comprehensive MSP relationships, which is more than any other firm in the industry.
- Expansion of health-insurance coverage, population growth, population aging, and increased prevalence of urgent-care centers.
- AMN’s growth strategy consists of increasing its network of temporary health care workers and making strategic acquisitions that complement its core offerings.
- AMN differentiates itself from competitors through its MSP, vendor management systems, and recruitment process outsourcing offerings.
**Current investment thesis**

- Demand for healthcare staffing services is expected to increase greatly with increased spending on healthcare and the projected shortfall of nurses and physicians.
- By 2024, healthcare employment is expected to grow by 16.4%, according to the U.S. Bureau of Labor Statistics, adding 5 million more professionals.
- The current shortage of physicians is projected to grow by approximately 100,000 by 2025. A surge of registered nurses is expected to retire over the next two to three years.
- According to a 2015 survey, nearly two thirds of nurses over the age of 54 are considering retirement, and of those, nearly two thirds plan to retire within three years.
- AMN Healthcare has over 10% of the market share for healthcare staffing, which is greater than any of its competitors.

**ESG Analysis**

According to the SASB dashboard the metrics important to Professional Services are:

- **Social Capital**: Defined by customer welfare and fair marketing and advertising. Currently AMN has no known issues or disclosures
- **Human Capital**: Defined by Diversity and inclusion and Compensation and benefits. AMN has a female CEO, female board representation on board, strong workplace policies, and reporting procedures in place.
- **Leadership & Governance**: Defined by Systematic Risk Management and Business ethics and transparency. AMN provides little disclosure or governance transparency. This is an area that HSRIF can use to take an activist position

**Valuation**

- Based on DCF model which assumed near term growth of 7% and terminal growth of 2%, AMN Healthcare is valued at $72/share (9% above the current trading price). This is in range of the current analyst media estimate of $70/share. However, AMN Healthcare is valued at $65/share using a comparative multiples model. This price is $1/share above the current trading price.
- These valuations account for the recent acquisitions of MedPartners and Philips DiPisa Leaders for Today, completed in early 2018. However, no other acquisition or inorganic growth strategies which AMN Healthcare may take in the future have been considered.
**6.3 American Water Works Company**

**Stock Name:** American Water Works Company, Inc (AWK)

**Principal:** Beth Foster

**Investment Principle:** Question the Status Quo

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### Business Description

- Largest investor-owned U.S. water and wastewater utility, serving approximately 15 million customers in 47 states.
- It provides water and wastewater services to residential, commercial, and industrial customers, and operates predominantly in regulated markets, which account for over 90% of earnings.
- Its nonregulated market-based businesses provide wastewater management operations for military bases, municipalities, oil and gas exploration and production companies, and other industrial customers.
- While regulated utility markets are often accompanied by slower rates of business growth, that growth is reliable and predictable. That allows American Water Works to consistently grow revenue, profits, operating cash flow, and dividend distributions. Additionally, acquiring new business in regulated markets can expedite growth by adding customers to the network.

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### Business Analysis

**Economic Moat:**

- The United States water and wastewater industries include investor-owned systems as well as municipal systems that are owned and operated by local governments or governmental subdivisions. Both industries are highly fragmented. The EPA estimates that approximately 84% of the United States water market is served by municipal systems and approximately 98% of the country's wastewater systems are government owned. According to the EPA, there are approximately 50,000 community water systems and approximately 20,000 community wastewater systems in the United States. Over half of the community water systems are very small, serving a population of 500 or less.
- This large number of relatively small, fragmented water systems and wastewater systems may result in inefficiencies in the marketplace, since such utilities may not have the operating expertise, financial and technological capability or economies of scale to provide services or raise capital as efficiently as larger utilities. Larger utilities that have greater access to capital are generally more capable of making mandated and other necessary infrastructure upgrades to both water and wastewater systems.
In addition, water and wastewater utilities with large customer bases, spread across broad geographic regions, may more easily absorb the impact of significant variations in precipitation and temperatures, such as droughts, excessive rain and cool temperatures in specific areas. Larger utilities generally are able to spread support services over a larger customer base, thereby reducing the costs to serve each customer. Since many administrative and support activities can be efficiently centralized to gain economies of scale, companies that participate in industry consolidation have the potential to improve operating efficiencies, lower costs per unit and improve service at the same time.

What Matters:

- **Regulation**: this prescribes AWK’s ability to operate in an area and the prices it can charge to its customers. It also is a sign of how compliant the company is with environmental standards which are core to its business as well as its ESG rating.
- **Geographic diversity**: means of risk management and economic moat. But as there are so many entities within AWK, what is the downside of something like lead poisoning happening in one of the areas it works on the entire company?
- **Investment Needs**: High Capex will continue to remain a substantial cost to the company going forward. However, because water is a basic necessity, these investments are necessary and regulators will provide rate increases for spending on improvements like the ones that really have to be made. That's a core reason American Water expects to generate growth of around 4% to 6% from its regulated business between 2016 and 2020.
AWK embodies the Investment Principle “Question the Status Quo” because of its commitment to incorporating leading environmental protection practices into the business. It makes significant investments each year in water safety and infrastructure integrity that benefits both consumer health and the natural environment.

### ESG Analysis

<table>
<thead>
<tr>
<th>Criteria</th>
<th>Stage</th>
<th>Signals</th>
</tr>
</thead>
<tbody>
<tr>
<td>Diversity</td>
<td>5</td>
<td>Women in leadership&lt;br&gt;Long-term recruitment strategy to attract diverse employees</td>
</tr>
<tr>
<td>Community Engagement</td>
<td>3</td>
<td>The American Water Charitable Foundation has committed $2.5 million to the National Recreation and Parks Association&lt;br&gt;2,266 Employees volunteered over 4,000 hours of community service in 2016</td>
</tr>
<tr>
<td>Energy and Environment</td>
<td>3</td>
<td>150+ water quality awards from regulators and industry orgs&lt;br&gt;68 EPA Partnership for Safe WATER Director Awards&lt;br&gt;21x better than the industry average for meeting all drinking water requirements in 2016</td>
</tr>
<tr>
<td>Board Governance</td>
<td>5</td>
<td>Executive pay is average and there is a good mix of directors with different tenures and experiences</td>
</tr>
<tr>
<td>Supply Chain</td>
<td>3</td>
<td>Aim to work with suppliers from underrepresented groups</td>
</tr>
<tr>
<td>Working Conditions</td>
<td>4</td>
<td>“Safety built into our culture”; extensive safety strategy, highlight employee satisfaction as being key to business success</td>
</tr>
<tr>
<td>Social Impact</td>
<td>4</td>
<td>Ultimately about providing clean, affordable water to 3.3M people</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>28</strong></td>
<td></td>
</tr>
</tbody>
</table>
## Valuation

<table>
<thead>
<tr>
<th>Company</th>
<th>EVT/EBIT (LTM)</th>
<th>EBIT Margin (%)</th>
<th>Enterprise Value (B)</th>
<th>PE Ratio (LTM)</th>
<th>Price to Book (LTM)</th>
<th>Price to Sales (LTM)</th>
<th>ROE (LTM)</th>
</tr>
</thead>
<tbody>
<tr>
<td>American Water Works (Nov ‘17)</td>
<td>17.95x</td>
<td>36.34x</td>
<td>21.8</td>
<td>31.06x</td>
<td>2.87x</td>
<td>4.73x</td>
<td>9.8%</td>
</tr>
<tr>
<td>American Water Works (May ‘18)</td>
<td>19.27x</td>
<td>37.06x</td>
<td>24.0</td>
<td>29.23x</td>
<td>2.87x</td>
<td>4.59x</td>
<td>8.0%</td>
</tr>
<tr>
<td>CenterPoint Energy, Inc</td>
<td>18.51x</td>
<td>11.15x</td>
<td>19.8</td>
<td>18.63x</td>
<td>2.34x</td>
<td>1.14x</td>
<td>44%</td>
</tr>
<tr>
<td>Sempra Energy</td>
<td>25.32x</td>
<td>17.04x</td>
<td>48.4</td>
<td>20.66x</td>
<td>2.21x</td>
<td>2.51x</td>
<td>2.0%</td>
</tr>
<tr>
<td>PPL Corp</td>
<td>13.77x</td>
<td>41.20x</td>
<td>42.3</td>
<td>12.80x</td>
<td>1.86x</td>
<td>2.65x</td>
<td>10.9%</td>
</tr>
<tr>
<td>Eversource Energy</td>
<td>17.49x</td>
<td>24.74x</td>
<td>33.6</td>
<td>19.21x</td>
<td>1.71x</td>
<td>2.45x</td>
<td>9.1%</td>
</tr>
<tr>
<td>Southwest Gas Holdings Inc</td>
<td>18.11x</td>
<td>12.70x</td>
<td>5.9</td>
<td>19.71x</td>
<td>1.93x</td>
<td>1.37x</td>
<td>11.1%</td>
</tr>
</tbody>
</table>
Stock Name: Bright Horizons Family Solutions (BFAM)
Principals: Faith Kirkpatrick
Investment Principle: Beyond Yourself

Business Description

- BFAM is a leading provider of employer-sponsored child care and early education services as well as other services designed to help employers and families better address the challenges of work and life. Their service offerings include center-based full service child care and early education, back-up dependent care, and educational advisory services. The company provides center-based full service child care, back-up dependent care and educational advisory services to more than 1,100 clients across the United States, the United Kingdom, Ireland, the Netherlands, Canada and India. General Mills, Overstock and Fox Entertainment are examples of business partnerships for child care centers. As of March 31, 2018, the Company operated 1,051 child care and early education centers with the capacity to serve 117,250 children and families.
- Bright Horizons has been recognized 17 times as one of FORTUNE magazine's "100 Best Companies to Work For" and is one of the UK's Best Workplaces as designated by the Great Place to Work Institute.

Business Analysis

Industry

- BFAM is the global heavyweight in its self-created industry. Management has maintained long-term financial targets of the high single digits for organic growth of its employer-sponsored child care centers. BFAM also has an M&A strategy of purchasing single centers and small chains in the non-US markets. BFAM reports on three segments: Full-Service Center-Based Child Care Services; Back-Up Dependent Care Services; Educational Advisory Services.

Competitive Advantage

- BFAM’s reliability/experience with running child care and early education services for its large corporate client base provides a narrow moat for service these types of large-scale employers.

Financial Performance

- Profitability: BFAM has demonstrated consistent YoY growth for 15 years. Over the past 6 years, gross margin has improved steadily from 23.0% to 24.7% and EBITDA margin has grown steadily from 15.0% to 18.6%.
- Leverage: BFAM is highly levered, at 3.27x EBITDA. However, the majority of this debt does not mature until 2020.
- 8-10% growth expected for 2018, as of 2018 Q1 earnings call on 4/30/2018

**Risks**

- Economic conditions, demand for child care, and corporate discretionary spending may negatively affect operating revenues
- Growth is driven by M&A, especially internationally. Stabilization and maturation of centers will slow growth
- Business dependent on hiring high quality teachers, focus on high quality service provision is critical to success
- Significant debt on balance sheet may restrict current and future strategic decisions if growth does not materialize

**ESG Analysis**

**Summary:**

- BFAM provides full service employer-sponsored child care and education services that enable parents, especially mothers, to better meet family and work life challenges
- BFAM has a three women in a list of executive officers among total of six (50% female) and six women on board of directors among total of thirteen members (46% female). The board has 9 independent board members (4 are BFAM management) and two of the thirteen are from Bain Capital; governance issues should be watched.

**Pros:**

- In 2017, BFAM achieved a 100/100 score on the Human Rights Campaign’s Corporate Equality Index for LGBT equality
- Small Environmental Benefit: By co-locating daycare with parent workplaces, BFAM is helping to reduce the distance that parents commute to take their kids to daycare, hopefully reducing auto emissions.
- Working Conditions: BFAM is focused on attracting and retaining a highly skilled workforce. Consistently named as a top employer by 3rd party sources in the US, UK and the Netherlands. One of Fortune Magazine’s 100 best places to work for 16 consecutive years
- Social Impact: Provide high quality care and education for young children in a safe and healthy environment

**Cons:**

- Board governance: Concerns about independence and influence of Bain Capital
- High cost of scandal: Given the nature of the business of childcare, there is major reputational risk should there be any abuse or misconduct related to children at a Bright Horizons facility. There are news reports of alleged misconduct by teachers and Bright Horizons settlements over the years, they do not have any lawsuits according to their 10-K. While BFAM has codes of conduct and ethics there is risk that a scandal could ruin the brand. Whistleblower and other
measures could be taken to improve best practices in policies for services companies.

<table>
<thead>
<tr>
<th>Valuation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Current price $98.88 ($5.49B market cap) with PE ratio of over 35x. Significant growth has exceeded HSRIF expectations in 2017 which valued the company at $78-$81 per share.</td>
</tr>
</tbody>
</table>

- Recommendation: Hold; analyze price to sell
6.5 Canadian National Railway Company

**Stock Name:** Canadian National Railway (CNI)  
**Principal:** Alexander Mitteldorf  
**Investment Principle:** Question the Status Quo

### Business Description

- CNI is a rail and related transportation services company in North America. Its services include rail, intermodal container, and trucking services as well as supply chain solutions, including warehousing and distribution and marine services.
- Transports various goods, such as automotive, coal, fertilizers, food and beverages, forest products, shipping grains, metal and minerals, petroleum and chemicals, and specialty crops.
- Operates a network of approximately 20,000 route miles of track spanning Canada and mid-America, from the Atlantic and Pacific oceans to the Gulf of Mexico. Its network can make connections to all points in North America.

### Business Analysis

Canadian National Railroad owns and operates a unique T-shaped rail network that spans the Pacific, Atlantic and Gulf of Mexico. It is also the only railroad with a detour around Chicago – a bottleneck for all other operators.

**Main drivers for results:**

**Revenue ton-miles** Growth in total paying weight over number of miles transported is one of the main drivers of revenue. CNI had been seeing a solid recovery in the metric after weak industry-wide numbers in 2015-16, which came at about 7% for both years. CNI then saw RTM grow an average of 14% year-over-year in the three quarters of 2017 compared to an average of 8% for peers. Rail congestion and a fairly harsh winter affected service levels and capacity though, and RTM has started lagging peers. Management has clearly flagged that more growth can mostly come through more CAPEX and has adjusted plans accordingly. However, this has severely impacted share prices.

**Operating ratio** Operating ratio is the proportion of operating cost to total revenues. CNI has historically had very strong ORs due to the characteristics of its network. Still, the company has been able to eke out efficiency gains and has consistently been ahead of competitors in this metric. CNI’s OR was at 55.9% in 2016, with Canadian Pacific Railway at 58.6% as the next best and an industry average of 66.7%. Canadian Pacific and others have been narrowing the distance and network congestion by CNI has allowed Canadian Pacific to surpass it in recent quarters. Nonetheless, CNI has the significant and hard-to-replicate advantage of its T-shaped network connecting the Pacific, Atlantic and Gulf coasts.

### ESG Analysis
Based on the Sustainability Accounting Standards Board’s consultation of participants and investors in Canadian National Railways's industry, these are some of the ESG topics that are seen as material to the industry, along with an overview on where CNI stands on them.

The company has a focus on continuously improving operating ratios. In that sense, it has industry-leading indicators in terms of GHG emission intensity and other relevant environmental indicators. It also has good disclosures, which are complete and comparable. On a 'social' lens, train accidents and employee injury are main concerns. The company has relatively high total recordable injury rates (TRIR), though it has seen mild improvements. The number of train accidents fell significantly in 2016, though this is due to a mild winter. Indicators on this metric have generally been sideways. As with environmental information, the company does fairly well in terms of disclosures. In terms of governance, the industry has history of anti-competitive behavior, though there are no recent cases for CNI.
<table>
<thead>
<tr>
<th>ESG Overview</th>
<th>CSR Report</th>
<th>10K</th>
<th>MSCI %ile</th>
<th>Moat effect</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>GHG emissions</td>
<td>Complete and comparable disclosure, misleading on intensity</td>
<td>-</td>
<td>26%</td>
<td>Yes</td>
<td>Fuel efficiency ties to GHG emissions and strong operating ratio</td>
</tr>
<tr>
<td>Air quality</td>
<td>Complete and comparable disclosure</td>
<td>-</td>
<td>-</td>
<td>Yes</td>
<td>Fuel efficiency ties to GHG emissions and strong operating ratio</td>
</tr>
<tr>
<td>Fuel management</td>
<td>Complete and comparable disclosure</td>
<td>Yes, context of capex for new locomotives increasing efficiency</td>
<td>20%</td>
<td>Yes</td>
<td>Fuel efficiency ties to GHG emissions and strong operating ratio</td>
</tr>
<tr>
<td>Social</td>
<td>Employee health, safety and well being</td>
<td>Complete and comparable disclosure</td>
<td>-</td>
<td>45%</td>
<td>Operating ratio? High TRIR. Employee safety linked to compensation. Targets are modest</td>
</tr>
<tr>
<td>Accident and safety management</td>
<td>Complete and comparable disclosure on FRA recordable accidents</td>
<td>-</td>
<td>45%</td>
<td>Operating ratio? Fall in 2016 due to mild winter. Trending sideways. Modest target</td>
<td></td>
</tr>
<tr>
<td>Governance</td>
<td>Competitive behavior</td>
<td>-</td>
<td>-</td>
<td>Yes if authorities ignore</td>
<td>Some accusations of anti-competitive practice in lumber market. Comp. Bureau dismissed. M&amp;A concentration</td>
</tr>
</tbody>
</table>
Current price $77.28 ($57.1B market cap) vs. about $100.3 on a model estimate.

The DCF model estimate is based on revenue growth of around 3% in the next 2 years (vs about 6% in the last 5 years), subsequently improving to 4%, and a terminal value of 4%, accounting for network congestion. Margins are conservatively forecast to improve only marginally ahead after the recent decline (2020 operating margin: 44.5%. 2017: 43%, 2011: 36.5%).

At a 20.7x P/E ratio, the company is close to the bottom relative to the peer average of 22x.
6.6 Facebook Inc.

Stock Name: Facebook, Inc. (NASDAQ: FB)
Principal: Ijeh Ogbechie
Investment Principle: Students Always

Business Description

- Facebook is the largest social network in the world with a mission to give people the power to build community and bring the world closer together.
- The company helps people discover and learn about what is going on in the world around them, enable people to share their opinions, ideas, photos and videos, and other activities with audiences ranging from their closest friends to the public at large, and stay connected everywhere.
- Its products include Facebook, Instagram, Messenger, WhatsApp and Oculus.
- Facebook generates substantially all of our revenue from selling advertising placements to marketers.
- Marketers purchase ads that can appear in multiple places including on Facebook, Instagram, Messenger, and third-party applications and websites.

Revenue Streams & Key Metrics:

- Substantially all of Facebook’s revenue is currently generated from advertising on Facebook and Instagram, and the substantial majority of revenue is generated from advertising on mobile devices.
- Advertising revenue represents more than 90% of the firm’s total revenue, with 50% coming from the U.S. and Canada, and 25% from Europe.
- The company’s key metrics include daily active users (DAUs), monthly active users (MAUs), and average revenue per user (ARPU).

Business Analysis
Industry
- The "Digital Advertising" market is expected to show a revenue growth of 7.2% in 2019.
- The market's largest segment is the segment "Search Advertising" with a market volume of US$47,558m in 2018 (Facebook ~$40bn in revenue in 2017).
- 77.7% of total revenue in the "Digital Advertising" market will be generated through mobile in 2022.

Competitive Advantage
- The growth in users and user engagement, along with the valuable data that they generate, makes Facebook attractive to advertisers in the short and long term.
- Facebook will continue to benefit from an increased allocation of marketing and advertising dollars toward online advertising, more specifically mobile and social-network ads where the company is especially well positioned.
- The firm is also applying artificial intelligence and virtual and augmented reality technologies to various products and security services, which may increase Facebook user engagement even further, helping to further generate attractive revenue growth from advertisers in the future.
- Facebook has a wide moat rating based on network effects around its massive user base and intangible assets consisting of a vast collection of data that users have shared on its various sites and apps. Given its ability to profitably monetize its network via advertising, we think Facebook will more likely than not generate excess returns on capital over the next 20 years.

Financial Performance
- Diluted EPS: $5.39 in 2017, $1.69 in Q1 2018
- Revenue: $40.65 billion in 2017, $11.96 billion in Q1 2018
- Daily active users: 1.4 billion as of Q4 2017, 1.45 billion as of Q1 2018
- Monthly active users: 2.13 billion, 1.45 billion as of Q1 2018
- ARPU: $6.18 in 2017, $5.53 in Q1 2018

Risks
- Overreaching regulation (GDPR) that cripples user growth or monetization capabilities.
- Increased competition from alternative advertising platforms, such as Amazon.
- Data security and privacy breaches that cause users to lose trust and decrease engagement while expenses rise more than expected due to litigation and headcount.

ESG Analysis
Summary:
- Facebook represents a Student Always activist investment in our portfolio. We expect that Facebook will demonstrate leadership follow its most recent Cambridge Analytica data scandal in actively managing its ESG and continually looking to improve the long-term viability and impact of the company. Recent ESG downgrades allow for an opportunity to participate in reversing the course of trending ESG scores by becoming vocal around important causes.

Key ESG Issues
- **Data security and privacy** - Developments, particularly with General Data Protection Regulation (GDPR) issued by the European Commission, will be important to monitor as they may set the tone for additional regulation in the US and possibly impact earnings.
- **Governance/ Controlling Shareholder** - Mark Zuckerberg as a controlling shareholder limits our tools as shareholders to remain active. Activist participation through additional governance-related efforts is the largest opportunity to improve ESG ratings.
- **Workforce Diversity** - We believe Facebook's workplace should strive to better represent the communities and populations it serves. This includes both gender and race diversity.

Action / Going Forward
As principles, one of the tools at our disposal is our collective voice. The current challenges facing Facebook present an opportunity to use our voice to drive positive change as it relates to ESG metrics and ratings, further securing the company's economic moat and our investment.

Please note that the Haas Socially Responsible Investment Fund participated in an Open Letter to the CEOs of Facebook's Largest Institutional Shareholders as it is intended to amplify our voice by calling for action.

The letter delineates ideas to be presented in Facebook's upcoming annual shareholder meeting that resonated with our Principles, including:
- A shareholder resolution filed by Arjuna Capital and co-filed by The New York State Common Retirement Fund, Illinois State Treasurer Michael Frerichs, Baldwin Brothers, Inc., and Harrington Investments seeks a report on how the company is managing [content governance](#) (including election interference, fake news, hate speech and online sexual harassment propagated by the platform).
- A shareholder resolution filed by Trillium Asset Management on behalf of the Park Foundation, calls for the board to appoint a [Risk Oversight Committee](#), the presence of which may have anticipated and mitigated today's crisis.
- A focus on disclosure pointing to [research by Ranking Digital Rights](#) that revealed that Facebook disclosed less about how it handles user information than six of its peers: Twitter, Google, Microsoft, Oath, Apple, and Kakao (a Korean company).
- The company's board should be reconstituted with new independent directors who are experts in data usage and ethics to oversee company practices, and that the roles of Chairman and CEO be split and for Mr. Zuckerberg to step aside and let new leadership reinvent Facebook, while instituting best practices in good governance.
This public letter is our first step in engaging the company and we intend for this to be an active debate for future Principals to further engage.

### Valuation

Our estimated fair value for Facebook is $202, representing a 5-year CAGR of 25% and an EPS for 2018 and 2019 of $8.50 and $10.35, respectively.

- Current price $173.86 ($503.4B market cap)
- P/E NTM=23.1x
- ROIC = 23.7%
- EV/EBIT = 20.6x
- Users: Facebook 2.2 billion, WhatsApp 1.5 billion, Instagram 800 million
- 1.4 billion DAUs, 2.2 billion MAUs, $5.53 ARPU
6.7 First Solar Inc.

Stock Name: First Solar (FSLR)
Principal: Tareq Abdallat
Investment Principle: Question the Status Quo

Business Description

- FSLR designs, manufacturers, and sells PV solar modules with thin-film semiconductor technology. It also designs, constructs, and sells, entire systems composed of the cells that it makes. It operates in two segments, components and systems.
- $2.94 B in Revenue; Market Cap of 7.13 B in 2017; HQ in Tempe AZ.
- 85% of First Solar sales generated in the US; CA accounts for about 45%.
- First Solar’s two business units each produce about 50% of revenue:
  - The systems segment provides turnkey solar-system services such as project development, engineering, procurement, and construction services, operations, and maintenance.
  - The components segment designs and makes the company’s cadmium-tellurium (CdTe) solar modules using thin-film technology.
- The company’s manufacturing facilities are in Malaysia and Ohio.
- sales offices in nine countries, including Canada, China, Germany, and India.
- international revenue comes in equal shares from customers in Australia, India, and Jordan

Business Analysis

Industry

- Solar industry heavily relies on government subsidies, e.g., investment tax credit (ITC), feed-in-tariff.
- In April, 2017 the International Trade Commission ruled in favor for a Section 201 trade case that eventually led to solar tariffs.

Competitive Advantage

- FSLR is a fully integrated solar company across the value chain.
- System efficiencies, cost reductions, and capabilities are not easy to replicate for other players that are not similarly integrated.
- FSLR continuously invests in R&D to enhance product efficiency and cost reductions.
- FSLR has high creditability which allows FSLR to offer meaningful system warranties.
- Higher margins compare to foreign competitors especially in the US market due to the 30% solar tariffs.

Financial Performance
In 2017, FSLR revenue increase up to $2.94B. And publicly announced 1,195 MW of specific solar panel supply deals, 1,095 MW of those contracts are in the U.S.  
First Solar also has a late-stage pipeline of booking opportunities of 8,300 MW and nearly three-quarters of that is in North America.  
In 2016, FSLR’s revenue was $2.9B down 18% due to the extension of ITC that has shifted demands further.  
It had net losses of $358M due to impairment charges of $819 as FSLR wrote off its old products to prepare for its Series 6 model which has lower cost while having the same efficiency.

### Risks
- In 2018 U.S. Representative Jacky Rosen of Nevada filed a bill that would eliminate the tariff President Trump put on solar cell and panel imports.  
- If this bill to eliminate solar tariffs gets any legs, it could be very disruptive to First Solar long term.  
- keep an eye on FSLR booking pace through the rest of the year (2018), especially considering the recent expansion in U.S. manufacturing capacity.  
- Solar market depends on government subsidies. The US investment tax credit is expected to end in 2021.  
- Solar has very few, low barriers to entry, and there is a chance that the current period of irrational pricing and overcapacity will be a repeating theme in future years.

### ESG Analysis

**Summary:**
- FSLR manufactures and develops clean energy, having good ESG practice by nature of its business.  

**Pros:**
- From 2012 to 2018, FSLR has recordable injury rate around 0.4, a lot lower than industry average of 4.9.  
- FSLR focuses on saving energy and water and reducing waste and greenhouse gas emission  

**Cons:**
- FSLR lacks female representation, with no women as executive officers  

### Valuation
- As of 05/02/2018 FSLR has P/E of 20.49 and EV/EBITDA 14.57  
- FSLR Operating margin of 7.31% and return on Assets of 1.96%.  
- FSLR current price as of 05/02/2017 was $68.02 per share vs $32 consensus.
### Gilead Sciences Inc.

**Stock Name:** Gilead Sciences (GILD)  
**Principal:** Takumi Kuroiwa  
**Investment Principle:** Beyond Yourself

#### Business Description

- Gilead Sciences is a powerhouse in the antiviral, infectious disease space, with specific expertise in HIV and HCV therapeutics  
- Historically, it’s known for its work in HIV – single tablet regimens – and global health efforts in combating the AIDS epidemic  
- Recently, it has been known for its hepatitis C virus (HCV) franchise of Sovaldi, Harvoni, and Epclusa - three drugs that cure a previously chronic and fatal disease

#### Business Analysis

**Competitive Advantage**

Gilead Sciences is a powerhouse in the antiviral, infectious disease space, with specific expertise in HIV and HCV therapeutics. Historically, it’s known for its work in HIV – single tablet regimens – and global health efforts in combating the AIDS epidemic. Recently, it has been known for its hepatitis C virus (HCV) franchise of Sovaldi, Harvoni, and Epclusa - three drugs that cure a previously chronic and fatal disease. Thanks to these excellent drugs, GILD has a strong moat in both the HIV and HCV markets due to its leadership in oral, antiviral therapeutics. GILD’s success was due to excellent track records in M&A. Acquisition of Triangle and Emtriva in 2003 and acquisition of Pharmasset and Sovaldi / Harvoni (8-12 week oral treatments for HCV with 90%+ cure rates) in 2012 earn most of current GILD profit.

**Financial Performance**

Gilead’s revenue and earing is growing rapidly thanks to very competitive HIV and HCV drugs. Revenue and EBITDA is 2017 is $25.7bn and 15.9bn.

**Risks**

Unpredictability of Trump administration’s healthcare policy. Pharma industry is significantly affected by the government policy. In US market, there is policy discussion on drug pricing. GILD is one of the target company. Their excellent HIV and HCV drugs are very expensive, which some people criticize that poor people cannot use them. In addition, about 20% of US people are covered by Medicaid, which means that US government is the biggest insurer in US market. The finance situation of Medicaid is severe, and drug price has risk to be lowered by government pressure.
In addition, the long-term financials of GILD largely depend on whether GILD can find new innovative drugs. Even though they have very good drugs now, these patents will be expired and they cannot earn a lot from them anymore. So, GILD has to conduct R&D or acquire pipeline of new drugs or companies which have them. In short, GILD’s long-term value depends on the success of R&D or M&A.

### ESG Analysis

- In 2016, Gilead partnered with more than 2,000 organizations to address unmet medical needs and lessen the impact of diseases such as HIV and viral hepatitis around the world. Funders Concerned About AIDS once again ranked Gilead as the leading corporate funder helping to address the HIV/AIDS epidemic. Gilead’s funding totaled almost $460 million in cash donations.
- Gilead added “inclusion” to the company’s core values and added two new Employee Resource Groups (ERGs) in 2016. This reinforced our commitment to workforce diversity, which drives innovation and helps us better serve patients. Gilead added 657 jobs to local communities around the world in 2016, representing a year over-year growth rate of eight percent.
- Gilead is the recognized leader in access to medication initiatives, with direct board involvement; distribution channels include regional partnerships providing Viread and Truvada at cost ($3.5/patient/month) and generic partners in India, South Africa, and China.
- Access programs reach 130 developing countries. In HIV, through Gilead’s access program, they have increased the number of people receiving the company’s antiretroviral therapies in the developing world from 30,000 in 2006 to more than 10 million in 2016. The countries where our access program operates account for more than 75 percent of the world’s HIV cases. These 10 million treated individuals represent about two thirds of the total number of people receiving treatment worldwide.

### Valuation

- Current price $72.14 ($94.1B market cap) vs. our $109.2 valuation
- EV/EBIT 6.5x, one of the lowest ratios in the biopharmaceutical industry considering the leveling off of the HCV franchise
6.9 Hanes Brand

HANES
Brands Inc

Stock Name: Hanes Brands (HBI)
Principal: Mikhael Abebe
Investment Principle: Student Always

Business Description

- HanesBrands is a socially responsible manufacturer and marketer of leading everyday basic apparel under some of the world’s strongest apparel brands in the Americas, Europe and Asia, as well as in Australia and South Africa. Their innerwear and activewear apparel brands found in the United States and elsewhere include Hanes, Champion, Playtex, Bali, Maidenform, JMS/Just My Size, Wonderbra and Gear for Sports. Outside the United States, they also have dominant national and regional brands, including DIM, Nur Die/Nur Der, Lovable, Abanderado, Shock Absorber, Zorba, Sol y Oro, Rinbros, Track N Field and Ritmo. Based in Winston-Salem, N.C., Hanes is a member of the S&P 500 and is ranked No. 490 on the Fortune 500 list. The company has approximately 65,300 employees in more than 40 countries.

- Founded in 1901, Hanes has a long history of innovation, product excellence, and brand recognition. Nearly 90 percent of U.S. households have Hanes’ products in them. Hanes’ innovations within the apparel industry include: tagless T-shirts and underwear, the invention of the sports bra and the stretch-cup T-shirt bra, being the first to advertise a bra on national television (Playtex), and experimenting with ComfortBlend and temperature-control X-Temp fabrics and seamless Smart Sizes bras.

- Their Sell More, Spend Less and Make Acquisitions strategies are driving growth and creating value for their shareholders, consumers, retailers, employees and communities. Hanes has made more than a half dozen acquisitions, including Maidenform Brands, Gear for Sports and Knights Apparel in the United States and DBApparel in Europe.

- Unlike most apparel companies, Hanes primarily operates its own manufacturing facilities. More than 90 percent of the apparel units that they sell worldwide and in the United States are manufactured in their own plants or those of dedicated contractors. This provides the company with significant leverage in maintaining healthy operating expenses and the highest standards of socially responsible manufacturing.
## Business Analysis

### Industry

Innerwear and activewear market has been flat to very modest decline (~ -1%) as the industry undergoes a transformation from large bricks and mortar to smaller stores and greater volume in online channels.

Hanes’ portfolio of brands hold the number-one or -two market shares in each of the core apparel categories, and has grown market share during this transformation. Its products are found in 80% of American households.

### Competitive Advantage

HBI has a moderate to strong competitive moat driven through its owned and controlled supply chain (scale economies), strong brand portfolio, and market share position.

The company operates 52 manufacturing facilities, mostly in Asia, Central America, and the Caribbean Basin. In 2016, approximately 72% of units sold were from finished goods manufactured “in-house” (cost advantage).

Hanes’ portfolio of brands hold the number-one or -two market shares in each of the core apparel categories, and has grown market share during this transformation. Its products are found in 80% of American households.

### Financial Performance

- Year-over-year growth in net sales, operating profit, and diluted EPS
- Return on Capital Employed: high double digit returns over the past 10 years
- Shareholder friendliness: Hanes’ issues dividends with a 3.5% yield
- Increase in 2017 Tax Expense due to one-time tax reform related charge

### Risks

- Sluggish industry growth / Continued shift in consumer behavior driving uncertainty
- Commodity price volatility
- Primary customers (e.g. Walmart/Target) source of moat erosion

### ESG Analysis

- Despite turbulence associated with its aggressive expansion and changes in the top executive team, Hanesbrands maintain its focus on sustainable goals, showing reductions in energy and carbon intensity, as well as water consumption.
- HBI stands out as all recently set environmental objectives have been met or surpassed, marked improvement on major categories tracked by MSCI.
- Social: founding member of Sustainable Apparel Coalition; 80% of products made in owned or dedicated facilities, and globalized standards applied; $2 mm invested in 76 community projects funded from environmental savings.
• Room for improvement: can incorporate sustainability efforts into public brand awareness to further drive industry standards and adoption, continue to explore cotton alternatives

Valuation

• Current price $18.65 represents a 32% discount to DCF valuation of $27.5 based on moderate revenue growth assumptions (~4.5% CAGR ‘17 to ‘21) constant to slightly eroding margins (FCF CAGR of ~2.9%) to accommodate continued investment in integrating acquisitions and adverse forex / material costs
6.10 Mastercard Inc.

Stock Name: MasterCard Inc. (NYSE: MA)  
Principal: Ijeh Ogbechie  
Investment Principle: Beyond Yourself

<table>
<thead>
<tr>
<th>Business Description</th>
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</table>

**MasterCard Inc** is a technology company in the global payments industry that connects consumers, financial institutions, merchants, governments and businesses worldwide

- Enables the use of electronic forms of payment instead of cash and checks.  
- Make payments easier and more efficient by creating a wide range of payment solutions and services using our family of well-known brands, including Mastercard®, Maestro® and Cirrus®.
- Important to understand that Mastercard:
  - Does not issue cards
  - Does not extend credit
  - Does not charge merchants directly
  - Does facilitate transaction between issuers and merchants

**Revenue Streams:**

- Domestic assessments fees: fees charged to issuers and acquirers based primarily on the dollar volume of activity on cards and other devices that carry our brands where the merchant country and the issuer country are the same.
- Cross-border volume fees: fees charged where the merchant country and the issuer country are different.
- Transaction processing fees: charged for both domestic and cross-border transactions and are primarily based on the number of transactions, including authorization, clearing and settlement
- Connectivity fees: charged to issuers and acquirers for network access, equipment and the transmission of authorization and settlement messages.
- Other processing fees: processing capabilities in the payment value chain for issuer & acquirer solutions, e-commerce merchants and mobile gateways.

<table>
<thead>
<tr>
<th>Business Analysis</th>
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</thead>
</table>

**Industry**

- 85% of total worldwide retail transactions are still conducted via cash or check, providing a huge pie for all electronic payment companies
- While cards account for 90% of contactless payments over the next 5 years, high-profile players such as Apple is pushing for digital transactions
- US in-store mobile payment volume to reach $503 billion by 2020 at CAGR of 80%
- Increasing emphasis on payment security under heightened regulation
• Rising competition from the three-party payment networks (e.g. American Express), third-party processors (First Data) and alternative payment systems/other entrants (e.g. Alipay)

Competitive Advantage

• A brand well known to and trusted by users of payment systems
• Powerful network effect provides greater incentives for banks, merchants and customers to transact using MasterCard services
• Barrier to establish a secured payment processing network are notably high: technology, traffic and regulation challenge etc.
• Its ability to provide services to both sides of the network, merchants and issuing banks, created a powerful moat from low-cost payment providers

Financial Performance

• Revenue was up 27% on a currency-neutral basis on a 14% rise in gross dollar volume.
• Switched transactions were up 17% during the quarter, while cross-border volume jumped 21% on a local currency basis.
• Adjusted operating expenses increased 35% in Q1 or 32% on a currency-neutral basis. M&A and strategic investments played in to the large increase in expenses.
• Looking ahead, the payment company expects 2018 revenue growth to be in the high-teens vs. a prior forecast for growth at a mid-teens rate.
• Mastercard's effective tax rate fell to 17.3% from 26.9% a year ago.
• Attractive ROE at 76.5% is much higher than its peers.

Risks

• Increased competition from alternative payment processing mediums, such as mobile wallets.
• Strategic partners might move to other competitor’s platform or start their own payment service unit.
• Payment systems are highly scrutinized in major jurisdictions, such as EU, Russia and China, hence subjected to material impacts from regulator and legislative changes.
• The business needs to meet ever higher requirement on privacy, data protection and security, which incur higher operating costs and impacts its growth.

ESG Analysis

• The social impact of financial inclusion for the banked and underbanked is broad and significant. MasterCard has been working with governments across several geographies to develop and roll out electronic payments solutions and social payment distribution mechanisms.
• The environmental (5%) and governance (40%) aspects are less prominent than social (55%) issues according to MSCI’s ESG report.
• 3 of 11 are women as independent directors on board; 2 of 7 are women executives.

Valuation
• Current price $192.99 ($201.5B market cap)
• P/E NTM = 28.6x
• Dividend yield 0.52%
• EV/EBIT = 25.7x
### 6.11 Microsoft Corporation

**Stock Name:** Microsoft (MSFT)

**Principal:** Robert Gutierrez

**Investment Principle:** Confidence Without Attitude

<table>
<thead>
<tr>
<th>Business Description</th>
</tr>
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<tbody>
<tr>
<td>- Microsoft is a global provider of software, hardware, and services</td>
</tr>
<tr>
<td>- Its business is organized into three segments: productivity and business processes (including Microsoft Office and Dynamics), intelligent cloud (including Azure, Windows Server OS, and SQL Server), and more personal computing (including Windows Client, Xbox, Surface, phones, and Bing search advertising)</td>
</tr>
<tr>
<td>- These segments represent 28%, 25%, and 46% of sales, respectively</td>
</tr>
</tbody>
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<table>
<thead>
<tr>
<th>Business Analysis</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Industry &amp; Competitive Advantage</strong></td>
</tr>
<tr>
<td>Microsoft has established a major competitive advantage driven by its installed base of over 350 million enterprise and consumer devices across their suite of productivity applications creating a strong network effect and high customer switching costs. It continues to maintain 90% market share of the PC operating system market, and new form factors (such as mobile and tablet) are as yet seen as complementary rather than replacements of the core PC platform. However, the influx of new device forms, longer PC refresh cycles, and Microsoft’s poor performance in mobile and tablet device markets, this market will be flat to declining, with Microsoft maintaining ~80% share over the medium term.</td>
</tr>
<tr>
<td>Despite imminent loss of market leadership to Linux in enterprise servers, Microsoft’s established installed base and successful Azure launch means it is well positioned to manage the transition to greater cloud services, and as of now, provides a far superior product suite to the other new or likely entrants (Google, Salesforce, Oracle, IBM).</td>
</tr>
<tr>
<td>Microsoft’s personal computing devices will not be a significant driver of its performance going forward, but coupled with the favorable adoption of Microsoft 10, it may serve to slow any attrition of developers leaving the Microsoft ecosystem</td>
</tr>
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</table>
### Financial Performance

Microsoft has very high rates of return on Equity and Assets – significantly outperforming its industry peers. However, recent years has seen slowing revenue growth (5yr growth of 4%, 3 yr growth of 3% and last year -8%), marked declines in returns on assets and equity (-7% pts since 2013), and reduced profitability (net margin ~20% vs 28% in 2013 and above 30% in 2011). It’s balance sheet is strong, but with increasing amounts of leverage (2.7x up from 1.8x in 2013). It has strong cash holdings – sufficient to support continued investment, coupled with a healthy and steady dividend of 15%

### Risks

**Competitive pressure**, especially on their emerging strengths - the aggressive entry into cloud services by a serious competitor (e.g. Google)

**Faster decline of their core business** driven by an accelerated adoption of new form technologies (mobile, tablet)

### ESG Analysis

Based on the SASB materiality matrix the areas of focus that are material to MSFT are (classified as an IT software firm) Energy, Social/Human Capital, and Governance

**Energy:**
One of largest green buyers of energy in the U.S. and have purchased more than 14 billion kilowatt hours of green power 44% of electricity used by datacenters comes from renewables. Goal is to pass the 50 percent by the end of 2018, 60% by 2020

**Social and Human Capital:**
Data Security: Microsoft (office) was part of larger email security breach in May 2017 and they’ve unfortunately not made clear what policies and procedures have been established to ensure they curtail the frequency of these issues or other of the numerous malware mishaps that have plagued the company.

Human Capital: In an effort to drive accountability, MSFT broadcasts its diversity statistics. They’ve underperformed, in both gender (26% women), race (3.7% African American) and ethnicity (5.5% Hispanic). However, they are recruiting more female and underrepresented minorities and their entry level statistics are near full representation. Additionally, they’ve now tied exec. bonus to diversity hiring goals.

**Governance:**

Established an alliance with the United Nations to strategize how technology can maintain the democratized use, freedom of speech and dissension, but also balance this against terrorism, authoritarianism, and illegal commerce (child pornography)
Microsoft brand still suffers from prior anti-competitive judgements that involved predatory pricing and collusion around DOS, internet browsers and media players.

### Valuation

DCF valuation suggests $96/share, with upside and downside risks fairly moderate and evenly weighted. Downside risk will be driven by increased competition in cloud and faster attrition in their core enterprise and productivity software suites. Upside risk will be driven by greater leadership in cloud, continued adoption of Windows 10, and greater mobile/tablet penetration/transformation.

Consensus analysts suggest a valuation of $110 vs $95 today with analysts fairly evenly split between hold and buy ratings, reflecting a PE ratio of 21 and other cashflow multiples well above industry average.
6.12  Prudential Financial Inc.

Stock Name: Prudential Financial Inc.
Principal: Molly Brister
Investment Principle: Students Always

Business Description

Prudential provides life insurance and retirement plans to people primarily in the United States and Japan. The company has approximately $1.264 trillion of assets under management, and derives revenue from insurance premiums, fees related to retirement plans and investment gains. Premiums from life insurance products are the largest source of revenue. The company's profitability depends on Prudential's ability to price its insurance and annuity products at a level that enables them to earn a margin over the costs associated with providing benefits and administering those products. By focusing on multiple revenue streams - insurance fees, asset management gains, retirement fees - the company is able to diversify its revenue streams. However, it is as a whole highly sensitive to interest rate movements, like many other financial services institutions.

Business Analysis

- Prudential has small “moat” due to high switching costs and brand name. PRU enjoys a solid reputation within the financial sector, which gives it an advantage in terms of brand power. It also has a switching costs competitive advantage that is hard to lose, especially when you are one of the biggest players in the industry (#2 largest life insurer in the US).
- Prudential Financial is in a unique position to enjoy sustainable growth given its advantage in terms of brand, switching costs and for its exposure to the aging population long-term trend. The operations of the firm seem to be well-run. Among peers, The ROIC is higher than average, and combined with a relatively low D/A give us a stronger ROE. Importantly, interest rates have gone up in the past year and any future increases would be positive for stock performance.
- Risks
  - Mortality/life expectancy risk: PRU carefully balances retirement and life insurance product mix so that life expectancy risk is greatly mitigated
  - Interest rate risk: PRU is affected by movements in interest rates directly due to the nature of their business. They try to mitigate this risk by matching duration of assets and liabilities
  - Overseas risk (mostly from Japanese business): Foreign currency risk and big investments in Japanese Government Bonds, due to the large business in Japan
  - Regulatory Risk: In 2013, PRU was named a “systemically important financial institution” (SIFI). Post Dodd-Frank, it is still unclear what additional restrictions will impact SIFIs.
ESG Analysis

- In terms of material ESG aspects, financial services firms have the largest risk factors around advertising/marketing, risk management, ethics, and investment choices. From the 10-K and other information, it appears that the firm is accurately addressing all the SASB material aspects for financial services:
  - **Fair marketing and advertising**: Prudential hired a Chief Customer Officer in 2014 to help ensure the customer experience is positive, and to make sure important information is communicated to customers in an effective way.
  - **Lifecycle impacts of products and services; and social impacts on assets and operations**: as of 2013, $2.9 billion invested in renewable power projects; started investing in green bonds in 2013 ($14 million as of May 2015); as of 2014, had provided $2 billion in impact investments. Also, the firm only works with vendors that have respectable CSR in place.
  - **Systematic risk management**: among many other risk mitigations, PRU has a risk committee at the board level (comprised only of independent directors), to oversee this issue.
  - **Business ethics and transparency of payments**: the firm has an extensive Code of Conduct and a Corporate Governance and Business Ethics Committee that revises all the political activities and related expenses that the company intends to implement.
  - **Included on the KLD 400**

The MSCI IVA rating is BBB. The MSCI analysis is also overall positive, but it raises a few flags:

**Pros**

- **Data Security**: Prudential has strong efforts in data security and protecting customer privacy. Its data security management includes industry-leading practices such as employee training on privacy policies, regular system auditing, an incident response plan, and customer education programs.
- **ESG Investments**: Prudential Financial also demonstrates above industry average efforts to integrate ESG into investments.

**Cons**

- **Regulation**: As a Global Systemically Important Insurer facing growing regulatory scrutiny.
- **Board Effectiveness**: The presence of over-boarded members and Lead Director Karl Krapek’s past controversial experience raise questions over the effectiveness of the board.
- **ESG Controversy**: In the past 12 months, Prudential has been involved in criticism / legal actions around:
  - Alleged improper wage deductions (August 2017, moderate risk)
  - Alleged role in Wells Fargo improper accounts (July 2017, moderate risk)
  - Alleged role in offshore tax havens (April 2017, moderate risk)

**Valuation**

- eVal model valuation: **$111** / share vs current price of **$108.9**
- Terminal sales growth of 2% (average of past 4 years is 14.6%)
- Net margins very conservatively forecasted to decline from current 10% to below 6% in terminal year
- Cost of equity modeled at 10%
- Leverage remains flat as a percent of assets
- Dividend payout ratio remains flat
- It seems fair priced compared to its peers (its current P/E NTM is 11x compared to the median of its peers of 18.6x)
6.13 Southwest Airlines

Stock Name: Southwest Airlines Co. (LUV)
Principal: Alexander Turbanov
Investment Principle: Confidence Without Attitude

Business Description

- Southwest Airlines Co. (the “Company” or “Southwest”) operates Southwest Airlines, a major passenger airline that provides scheduled air transportation in the United States and near-international markets. For the 43rd consecutive year, the Company was profitable, earning $2.2 billion in net income. Southwest principally provides point-to-point service, rather than the “hub-and-spoke” service provided by most major U.S. airlines. Southwest Airlines launched international service in 2014, and ended 2015 with service to 11 international destinations.

- The company is a market leader in terms of financial, operational and ESG metrics. Currently trading at 22.9% below consensus price target (Last price as of May 1, 2018, is $52.94, 12m target price is $68.65). The international expansion strategy maintaining its share in the domestic market is a key catalyst that would help drive growth in the future.

Business Analysis

Industry

- Competition – High
- Bargaining power of customer – High
- Bargaining power of Supplier – High
- Threat of new entrants – Low (capital intensive and regulated)
- Threat of substitutes – Low (due to extremely low prices for short distance flights)

Competitive Advantage

- Low cost operational strategy - point-to-point service, faster turnaround, low cost secondary airports, and strong employee culture.
- Better balance sheet structure: the only domestic airline with investment-grade credit rating

Performance

- Operations: 84% load factor, 81% on-time performance
- Finance: Record Free Cash Flow, and they return 90% of it to their shareholders ($2bn out of $3bn). Leader in key profitability metrics – EBITDA margins 25.4%, profit margins over 11.6%, ROA over 10%, and ROIC 30%
Risks

- Recession is a systematic risk that can affect the whole highly cyclical airline industry.
- Competition in the domestic markets putting pressure on the load factor.
- Increase in oil prices and labor cost might negate the low cost advantage.

ESG Analysis

Summary:

- Southwest until recently maintained IVA rating at high A level (MSCI), which means top 25% percentile. On April 27, 2018, Southwest was downgraded from ‘A’ to ‘BBB’ (top 50%), mostly because of the recent engine accident, and has a potential to recover after a while.

Pros:

- The rights of Southwest employees are well protected (83% collective bargaining coverage). The company provides performance-based rewards to all employees and offers extensive training programs. Employees surveys show the great level of employee engagement and satisfaction.
- Although Southwest's estimated average fleet age exceeds the industry average (11.2 years vs. 8.9), the company has implemented fleet renewal (38 new 737-800s were introduced in 2016). This may reduce the company’s carbon risks in the short to medium term.
- Stands out in customer service compared to peers.

Cons:

- An engine explosion on Southwest Flight 1380 (April 2018) that caused one death, seven injuries and forced an emergency landing, will intensify regulatory scrutiny and elevate the company's risks of lawsuits.
- Risks of losing customers to competitors are exacerbated by service quality concerns, including Southwest's on-time arrival rate being below that of its peers. The capacity of the company to reinvigorate its safety controls and improve customer satisfaction may be hindered by board entrenchment risks.
- Within its workforce, the rights of Southwest employees are well protected (83% collective bargaining coverage) and performance-based rewards and training are offered to all staff, which promotes highly engaged employees that are less likely to strike.
- While a board refresh would improve management oversight, restrictions in director elections limits the scope of shareholder influence.

Valuation

- Last price $52.94 ($33.2B market cap) vs. 12M target price $68.65
- P/E = 12.6x compared to median of 11.2x, EV/EBITDA = 6.0x compared to median of 5.4x
- HSRIF Recommendation: Hold (Consensus: 75% buy, 25% hold)
6.14 Starbucks Corporation

Stock Name: Starbucks (SBUX)
Principal: Alexander Mitteldorf
Investment Principle: Beyond Yourself

Business Description

- **Starbucks Corporation** is an American coffee company and coffeehouse chain. Starbucks was founded in Seattle, Washington in 1971.
- It offers coffee drinks and food items, as well as roasted beans, coffee accessories, and teas in more than 25,000 coffee shops in 75 countries.
- Starbucks operates more than 12,700 of its own shops, which are located mostly in the US, while licensees and franchisees operate roughly 12,375 units worldwide – though just bought out China JV.
- ESG ethos is incorporated in company brand and culture – ‘We also believe our Starbucks Global Responsibility strategy, commitments related to ethically sourcing high-quality coffee, contributing positively to the communities we do business in and being an employer of choice are contributors to our objective’ (10K).

Business Analysis

- **Growth in number of stores**: There were 28.2 thousand Starbucks stores around the world as of end- 1Q18, with 17k in the Americas (predominantly the US) and 8k in Asia-Pacific (mainly China). In the US, Starbucks is the third largest food/coffee/snack chain in number of locations, after Subway and McDonald’s. New stores drive revenue growth and have been the source of roughly 85% of revenue growth in the last five years. The follow-up question is then whether there will be a slowdown in store number growth after a period where stores have been opening at a pace just shy of 9% yoy in the last five years (Americas: 5%, APAC: 18%). In particular, there is some discussion of a saturation point having been reached in the US (3.6 other Starbucks within one mile of the average location), though there’s arguably still ample space for store growth in Asia-Pacific.

- **Comparable store sales** (comps) growth has been trending down from an average a little below 7% from 2011-15 to a bit above 3% in recent quarters (US from 7% to 3.5%, APAC from 8% to 3%) and against management expectations of a 4-6% range. With the US already a highly penetrated market, comps growth is particularly relevant for earnings growth. Apart from continuous product development, management is hoping to increase comps through a loyalty program (which has seen delays in implementation but was rolled out recently) and increasing sales in the afternoon window. Additionally, a mobile app for ordering...
and paying has been introduced that has helped increase sales at peak times in the highest volume stores.

- **Margins** are stable at around 25% after inching up from about 20% five years ago. Starbucks's COGS is predominantly from commodities such as coffee, which have volatile prices and over which the company has little control. On pricing, company management suggest they run regular experiments on pricing power and would be able to adjust to any input price shocks. The revenue mix is also improving as areas with higher margins such as Asia Pacific (27%) and Channel Development (CPG products. 40%) growth at higher rates than relatively low-margin EMEA (8%). On operating expenses, the company can lever G&A and has recently committed to reviewing costs on that side to keep earnings growth around 12%.

### ESG Analysis

The recent racial bias incident at a Starbucks store in Philadelphia highlights two important ESG aspects to the company. First, the brand’s stated ESG commitment & management’s commitment to it led to a handling of the situation that seems to have prevented a stronger backlash on the business. Second, it highlights an underlying risk for Starbucks in that it has a large customer-facing workforce and staff and supplier actions may not always align with brand ethos or follow guidelines. This may also be reflected in issues such as product quality & safety and supply chain practices.

Based on the Sustainability Accounting Standards Board’s consultation of participants and investors in Starbucks’ industry, below are some of the ESG topics that are seen as material to the industry, along with an overview on where Starbucks stands on them.

Given the company's strategic moat relying on a brand associated with quality and fair trade, we believe the topics of ‘Product quality and safety’ and ‘Supply chain management’ are particularly relevant. On the former in particular, there is little management focus to control risks (though episodes on product quality and safety have been fairly rare). While the risks are relatively small given the product mix of the company, episodes such as with Chipotle highlight the risks of a string of incidents might affect company performance in significant and persistent ways.
<table>
<thead>
<tr>
<th>SBUX ESG Overview</th>
<th>SASB</th>
<th>IWG</th>
<th>CSR R</th>
<th>10K</th>
<th>MSCI ¥%ile</th>
<th>Moat effect</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Environment</strong></td>
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</tr>
<tr>
<td>GHG emissions</td>
<td>94%</td>
<td>-</td>
<td></td>
<td>64%</td>
<td>Brand</td>
<td></td>
<td>GHS/Sales down trend</td>
</tr>
<tr>
<td>Energy management</td>
<td>67%</td>
<td>-</td>
<td></td>
<td></td>
<td>Brand, Cost?</td>
<td>Focus on offsetting sources, hard to gauge intensity</td>
<td></td>
</tr>
<tr>
<td>Water and wastewater management</td>
<td>89%</td>
<td>-</td>
<td>Mentioned as input price risk, risk factor, especially abroad</td>
<td>Not mentioned 2016, only 2014 (tlg met)</td>
<td>Brand, Cost?</td>
<td>No continuous data</td>
<td></td>
</tr>
<tr>
<td>Product packaging</td>
<td>61%</td>
<td>-</td>
<td></td>
<td></td>
<td>Brand, Cost?</td>
<td>How relevant?</td>
<td></td>
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<tr>
<td><strong>Social</strong></td>
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<tr>
<td>Customer welfare</td>
<td>63%</td>
<td>-</td>
<td>Risk factor on health</td>
<td>63%</td>
<td>Brand?</td>
<td>Sugar target 2020 in indulgent bev</td>
<td></td>
</tr>
<tr>
<td>Data security and customer privacy</td>
<td>82%</td>
<td>-</td>
<td>Risk factor on brand</td>
<td>7%</td>
<td>Brand</td>
<td>May become more relevant with customer loyalty prog</td>
<td></td>
</tr>
<tr>
<td>Fair disclosure and labeling</td>
<td>78%</td>
<td>-</td>
<td>-</td>
<td>14%</td>
<td>Brand, Cost?</td>
<td>NGO campaigning for non-GMO only</td>
<td></td>
</tr>
<tr>
<td>Fair marketing and advertising</td>
<td>78%</td>
<td>-</td>
<td>Risk factor, boilerplate</td>
<td>Risk factor on health</td>
<td>Brand</td>
<td>Seems unlikely to be overly relevant</td>
<td></td>
</tr>
<tr>
<td>Product quality and safety</td>
<td>94%</td>
<td>-</td>
<td>-</td>
<td>7%</td>
<td>Brand</td>
<td>Little management syst. To monitor store quality (MSCI)</td>
<td></td>
</tr>
<tr>
<td>Labor relations</td>
<td>95%</td>
<td>-</td>
<td>Unions insignificant</td>
<td>Risk factor for costs</td>
<td>Above</td>
<td>Likely to stay so</td>
<td></td>
</tr>
<tr>
<td>Fair labor practices</td>
<td>95%</td>
<td>-</td>
<td>Risk factor for costs</td>
<td>Risk factor for costs</td>
<td>Above</td>
<td>Licensed stores may be risk, no w/force monitoring</td>
<td></td>
</tr>
<tr>
<td>Compensation and benefits</td>
<td>85%</td>
<td>-</td>
<td>Risk factor for costs</td>
<td>Risk factor for costs</td>
<td>Above</td>
<td>No &quot;fair remuneration&quot; policy, stable turnover</td>
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<tr>
<td><strong>Governance</strong></td>
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<tr>
<td>Materials sourcing</td>
<td>83%</td>
<td>-</td>
<td>Risk factor, especially abroad</td>
<td>Not mentioned 2016, only 2014 (tlg met)</td>
<td>Brand</td>
<td>No continuous data</td>
<td></td>
</tr>
<tr>
<td>Supply chain management</td>
<td>83%</td>
<td>-</td>
<td>Risk factor, commitment to responsibility</td>
<td>Risk factor, especially abroad</td>
<td>64%</td>
<td>Brand</td>
<td>Relatively low on controversial mateials. Strong on supply chain labor management</td>
</tr>
</tbody>
</table>
Valuation

- We see an intrinsic price of around USD 70 per share for Starbucks. These rest on comparable store sales keeping their trend for the foreseeable future and then slowing down in the US (from about 4% to a terminal value of 0.5%). We see store growth slowing in all geographies and margins being kept at similar values from recent years.

- In terms of multiples, Starbucks is around the middle of comparable companies, though a direct comparison is made more difficult due to the lack of competitors in the same space.
6.15 Toyota Motor Corporation

**Stock Name:** Toyota Motors (TM)  
**Principal:** Alexander Turbanov  
**Investment Principle:** Confidence Without Attitude

### Business Description

Toyota Motor Corp. engages in the manufacture and sale of motor vehicles and parts. It operates through the following segments: Automotive Operations, Financial Services, and All Other. The Automotive Operations segment designs, manufactures, assembles and sells passenger cars, minivans, trucks, and related vehicle parts and accessories. It is also involved in the development of intelligent transport systems (ITS). The Financial Services segment offers purchase or lease financing to Toyota vehicle dealers and customers. It also provides retail leasing through lease contracts purchase by dealers. The All Other segment deals with the design and manufacture of prefabricated housing, information technology related businesses that includes a web portal for automobile information called GAZOO.com, and sales promotions for KDDI communication related products. The company was founded by Kiichiro Toyoda on August 28, 1937 and is headquartered in Toyota, Japan.

### Business Analysis

**Industry**

- The demand for cars is volatile and depends to a large extent on economic, social and political conditions in a given market and the introduction of new vehicles and technologies, as well as on costs incurred by customers to purchase and operate automobiles (such as fuel costs or alternative costs)
- The worldwide automotive market is highly competitive. Factors affecting competition include product quality and features, safety, reliability, fuel economy, the amount of time required for innovation and development, pricing, customer service and financing terms.
- The worldwide automotive industry is subject to various laws and governmental regulations including those related to vehicle safety and environmental matters such as emission levels, fuel economy, noise and pollution.

**Competitive Advantage**

- Established market player with a long history of successful operations, strong sales position and balance sheet.

**Performance**

- ROE 13.23%, ROA 4.86%, ROIC 5.74%
- Revenue growth (12/31/17 LTM) – 7.8%,
- EBITDA margin 13.56%, FCF $25.53 bn

**Risks**

- Losing market share because of inability to keep up with competitive pressure.
- Toyota purchases supplies including parts, components and raw materials from a number of external suppliers located around the world. For some supplies, Toyota relies on a single supplier or a limited number of suppliers, whose replacement with another supplier may be difficult. Increases in prices for raw materials (such as steel, precious metals, non-ferrous alloys including aluminum, and plastic parts) can affect the profitability.
- Toyota is sensitive to fluctuations in foreign currency exchange rates and is principally exposed to fluctuations in the value of the Japanese yen, the U.S. dollar and the euro and, to a lesser extent, the Australian dollar, the Russian rouble, the Canadian dollar and the British pound.

**ESG Analysis**

**Summary:**

Toyota leads in clean tech: 13% of its vehicles sold globally are hybrids and the company proactively participates in smart mobility projects to develop new opportunities with next generation technologies. However, product safety and quality risks continue to impact all major automakers. Additionally, Toyota ranks poorly on governance due to limited board independence.

**Pros:**

Toyota has, under the “New Vehicle Zero CO2 Challenge,” decided to challenge itself to reduce vehicle CO2 emissions by 90 percent in comparison with 2010 levels, by 2050. To realize this, in addition to mileage improvement of engine-driven vehicles, Toyota will promote the development of next-generation vehicles with low or zero CO2 emissions.

The Prius was released worldwide in 2000, making it the first mass-produced hybrid vehicle. The U.S. EPA and California Air Resources Board (CARB) rate the Prius as among the cleanest vehicles sold in the United States based on smog-forming emissions. The 2016 Prius Eco ranks as the all-time most fuel efficient gasoline-powered car available in the US without plug-in capability.

Toyota demonstrates some elements of best practice in its approach to the management of quality related risks, such as certification requirements for Tier 1 suppliers and educating suppliers through CSR meetings. The company also has test facilities and employee education programs on quality issue.

**Cons:**

Toyota Motor is one of the companies at the center of the Toyota ‘keiretsu’ (a set of companies with interlocking business relationships and shareholdings) with a variety of ancillary firms, namely its suppliers and customers, being other key members, such as Denso. Toyota appointed its first three non-executive directors in 2013, but as of June 2016 the company continues to lack board majority independence (3/11).

**Valuation**

- Current price $130.97 (MarCap $213.7 bn) vs. 132.48 consensus target price in 12m (100% hold recommendations)
- TM currently with a premium to peers on EV/EBITDA capitalizing on both stronger balance sheet and leading sales position. EV/EBITDA = 10.34x compared to mean of 4.8x
- The automotive sector trades at a significant discount to the overall market due to concerns over long-term growth rates and continued margin pressure. We believe these concerns are fully priced into the stock and TM currently offers a compelling risk/reward.
- Recommendation: Hold
**Unilever NV**

**Stock Name:** Unilever (UN)  
**Principal:** Adrian Rodrigues  
**Investment Principle:** Confidence Without Attitude

### Business Description

- One of the largest fast moving consumer packaged goods companies  
- Owns an international portfolio of personal care, food, drink and home care products  
- Majority of revenue comes from existing brands, but most growth is from newer sustainable brands  
- 400+ brands; 13 over 1 BN Euros  
- Unilever is known for its personal care products such as Axe, Dove and Dermalogica, as well as its food products such as Hellman's, Heartbrand, Lipton, Blue Band and Knorr  
- Unilever has a core competency in emerging markets, with 57% of its business occurring there, with the CPG market in developed economies stagnating overall.

### Business Analysis

**Industry**

Overall, CPG sales are slowing, which is why Unilever has shifted to M&A in the eco-friendly CPG brand space in order to diversify into new markets, as well as shift from food to personal care.

Emerging markets remains the majority of Unilever’s business, which represents both a competitive advantage as well as a risk due to the uncertain nature of these markets and the current political climate surrounding globalization.

**Competitive Advantage**

Unilever has a strong competitive advantage in its entrenchment in the supply chain of retailers (an intangible asset) and a cost advantage. The firm’s broad portfolio of products across multiple categories and supermarket aisles creates a virtuous cycle of competitive advantages, comprising intangible assets, switching costs, and cost advantages, that new entrants simply could not replicate.
It’s diversity in geography is also a competitive advantage due to its strong presence in emerging markets, which can represent a major source of moat as these economies continue to grow while the developed economies stagnate with regards to CPG products.

Unilever’s Sustainable Living Plan is unique to the business world

**Financial Performance**

Sustainable Living brands grew 40% faster than the rest of the business

**Risks**

Emerging markets slowdown would represent a strong financial shock to Unilever, which is a possibility given the current global political climate surrounding globalization.

M&A purchases in the eco-friendly space may not represent strong long-term value if the business case for these products does not pan out

**ESG Analysis**

<table>
<thead>
<tr>
<th>Social</th>
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<tbody>
<tr>
<td>● 46% of managers are women</td>
<td></td>
</tr>
<tr>
<td>● Brands such as Axe and other skin whitening products represent a contradiction on the core sustainability mission of Unilever</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Governance</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>● The ratio of CEO to average employee pay has been estimated and is found highly unacceptable at 139:1</td>
<td></td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Environment</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>● Plans for 100% sustainable sourcing</td>
<td></td>
</tr>
<tr>
<td>● Over 600 Unilever sites were sending zero non-hazardous waste to landfill</td>
<td></td>
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</table>

<table>
<thead>
<tr>
<th>Valuation</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Current price $56.49 ($166Bn market cap)</td>
<td></td>
</tr>
</tbody>
</table>
6.17 Walt Disney Company

Stock Name: Walt Disney (DIS)
Principal: Carol Macavelica
Investment Principle: Beyond Yourself

Business Description

The Walt Disney Company is an entertainment company that operates in four business segments: Media Networks, Parks and Resorts, Studio Entertainment, and Consumer Products & Interactive Media.

- **Media Networks**: Includes cable and broadcast television networks, television production and distribution operations, domestic television stations, and radio networks and stations.
- **Parks & Resorts**: Designs and develops new theme park concepts and attractions, as well as resort properties.
- **Studio Entertainment**: Produces and acquires live-action and animated motion pictures, direct-to-video content, musical recordings and live stage plays.
- **Consumer Products & Interactive Media**: Develops and publishes games, primarily for mobile platforms, books, magazines and comic books.

Business Analysis

- **Franchise Strategy**: Studio Entertainment division has become more profitable in recent years. It appears that Disney can still grow its business through its non-sports franchises, with new intellectual property over the long term, and the potential success of Disneyland theme parks in China over the near term.
- **Synergies from its acquisitions**: Disney’s media properties seem to bring in relatively stable cash flow from a repeat audience of fans, the company can obtain strong movies and TV content, and further earn money from these franchises through related endeavors such as merchandising and theme parks (Toy Story, Star Wars), businesses in which Disney has extensive experience.
- **Shift in younger audiences’ eyeballs** from TV to the Internet has hit Disney’s legacy cable business, ESPN in particular.
- **Direct to Consumer Strategy (Disney DTC)** is focused on combining Disney brands with their proprietary, industry-leading technology to give users unparalleled access to their content (ESPN Streaming Service in 2018 and Disney App 2019).
- **Risks**: Piracy and technology changes, customer welfare and safety in parks and toys, and economic downturn impact discretionary spending and regulation could hamper international travel.

ESG Analysis
Disney has been downgraded to 'BBB' from 'A' by MSCI. The environmental (11%) and governance (21%) aspects are less prominent than social (68%) issues according to ESG report.

**Social**
- The company has been hit by new employee lawsuits and a fatal customer accident at one of its parks which could affect its brand image and result in hefty settlements.
- Disney continues to be plagued by accusations of human rights abuses at its Chinese suppliers, despite enhanced coverage of its supply chain audit program and remarkable transparency initiatives.
- These controversies reveal gaps in the implementation of these programs and pose substantial liability and reputational risks to Disney.

**Governance**
- Disney has provided leading professional development opportunities for its 195,000 employees.
- The largest workforce in the MSCI ACWI Media industry, which should help boost productivity and morale. Yet, Disney continues to be weighed down by employee lawsuits related to safety, wages and layoffs.

**Environment**
- The company has implemented several energy efficiency initiatives and increased the use of renewable energy; managing to sensibly bring down its carbon emissions. Disney’s exposure to rise costs associated with carbon regulation is higher than most of its Media peers due to its involvement in the hotel & park businesses.

**Valuation**
- Current price: $100.06, analyst targets: $95 - $130 consensus $119.41 (Market Cap $150.4 B)
7. Haas Socially Responsible Investment Fund Class of 2018 Principals

Tareq Abdallat
Mikhael Abebe
Molly Brister
Beth Foster
Robert Gutierrez
Faith Kirkpatrick
Takumi Kuroiwa
Carol Macavilca
Alexander Mitteldorf
Ijeh Ogbechie
Samantha Penabad
Adrian Rodrigues
Alex Turbanov