In our updated ESG primer, we cover a number of new topics ranging from climate change to management quality and controversies. Below, we highlight 10 reasons why we think you should care about ESG.

1. **You can do good and do well**
ESG could boost your returns by a significant amount: a strategy of buying stocks that rank well on ESG metrics would have outperformed the market by up to 3 percentage points per year over the last 5 years.

2. **A tsunami of assets is poised to invest in “good” stocks**
Three critical investor cohorts care deeply about ESG: women, millennials, and high net worth individuals. Based on demographics, we estimate over $20 trillion of asset growth in ESG funds over the next two decades – equivalent to the size of the S&P 500 today.

3. **70% of US assets can’t be analyzed without using ESG**
Intangible assets — assets tied to reputation, brand and intellectual property – have reached record highs for the S&P 500 companies. Analyzing financial metrics alone simply won’t suffice anymore, in our view.

4. **Happy employees = better returns**
Companies with high employee satisfaction ratings on Glassdoor.com have outperformed those with low ratings by nearly 5 percentage points per year over the past 6 years.

5. **The best signal of earnings risk we have found**
Traditional financial metrics, such as earnings quality, leverage and profitability don’t come close to ESG as a signal of future earnings volatility or bottom-line risk.

6. **ESG could have helped avoid 90% of bankruptcies**
15 out of 17 (90%) bankruptcies in the S&P 500 between 2005 and 2015 were of companies with poor Environmental and Social scores five years prior to the bankruptcies.

7. **“Good” companies enjoy a lower cost of capital**
Just like consumers have credit scores, companies pay different rates depending on their risk profiles. The cost of debt for “good” versus “bad” companies based on ESG scores can be nearly 2 full percentage points lower.

8. **ESG “controversies” have cost investors a lot**
Major ESG-related controversies during the past six years were accompanied by peak-to-trough market capitalization losses of $534 billion for large US companies. Loss avoidance is key for portfolio returns over time.

9. **Climate change is top-of-mind for investors**
Climate change is the #1 ESG issue for ESG asset managers, according to US SIF (The Forum for Sustainable and Responsible Investment), with $3tn of ESG assets considering climate change as part of their investment decisions.

10. **Actually, you already do care about ESG!**
ESG is not new. Is management compensation aligned with shareholders? Is key talent happy or at risk of moving to a competitor? Does lax environmental behavior mean elevated legal risk? Stocks have been bought and sold on ESG concerns for decades. Today’s ESG discussions are largely focused on standardizing or codifying these elements, like we have seen for accounting and financial standards.

---

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**ESG stands for Environmental, Social and Governance.**

This is a redacted version of our ESG primer. BofA Securities clients can access the full report through their BofA Securities representative.
10 reasons you should care about Environmental, Social and Governance (ESG)

Exhibit 1: 10 reasons you should care about Environmental, Social and Governance (ESG)

<table>
<thead>
<tr>
<th>#1: ESG can generate alpha</th>
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<tr>
<td>Relative performance of top ESG-ranked companies vs. equal-weighted S&amp;P 500</td>
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<th>#2: Demographics suggests $20tn asset potential</th>
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<td>Q: Do you currently own or are you interested in adding ESG assets to your portfolio?</td>
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<th>#3: Financial metrics alone won’t suffice anymore</th>
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<td>Intangible assets as % of total S&amp;P 500 book value</td>
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<th>#4: Happy employees – $</th>
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<td>Relative performance of top Glassdoor-ranked companies vs. bottom-ranked companies</td>
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<th>#5: The best signal of bottom line risk we have found</th>
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<td>Median change in companies’ EPS volatility over the next 3 years vs. their ESG scores (2005-2016)</td>
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<th>#6: Avoid bankruptcy risks</th>
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<td>90% of bankruptcies in the S&amp;P 500 between 2005 and 2015 could have been avoided by screening out companies with below-average Environmental &amp; Social scores 5 years prior</td>
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<th>#7: “Good” companies enjoy lower funding costs</th>
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<td>S&amp;P 500 companies’ weighted-average cost of debt vs. their ESG scores (9/2019)</td>
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<th>#8: ESG controversies can cost a lot</th>
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<tr>
<td>Average peak-to-trough performance of ESG controversy stocks relative to the S&amp;P 500 (30 days prior to through 300 days post controversy)</td>
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<th>#9: Climate change – $3tn opportunity</th>
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<td>ESG categories incorporated by money managers in US</td>
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<th>#10: Actually, you already do care about ESG!</th>
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<tr>
<td>Is management compensation aligned with shareholders?</td>
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Is key talent happy or at risk of moving to a competitor? Does lax environmental behavior mean elevated legal risk?

Stocks have been bought and sold on ESG concerns for decades. Today’s ESG discussions are largely focused on standardizing or codifying these elements, like we have seen for accounting and financial standards.

1. You can do good and do well
ESG could boost your returns by a significant amount: buying a strategy of stocks that rank well on ESG metrics would have outperformed the market by up to 3 percentage point per year over the last five years, based on our backtested analysis.

Chart 1: ESG has generated consistent alpha in recent years
Relative performance of top quintile companies by ESG scores vs. equal-weighted universe 1/2007-8/2019

Source: MSCI ESG Research LLC, Sustainalytics, Refinitiv, FactSet, BofA Merrill Lynch US Equity & Quant Strategy
Backtesting is hypothetical in nature and reflects application of the analytical approach prior to its introduction. It is not actual performance and is not intended to be indicative of future performance.

2. A tsunami of assets poised to invest in “good” stocks
Three critical investor cohorts care deeply about ESG: women, millennials, and high net worth individuals. Based on demographics, we conservatively estimate over $20tn of assets growth in ESG funds over the two decades — equivalent to the S&P 500 today.

Chart 2: Momentum building for Impact Investing in bellweather demographic segments
% of survey respondents who currently own or plan to add exposure to ESG assets

Source: 2018 U.S. Trust Wealth and Worth Survey
3. 70% of US assets can't be analyzed without using ESG

The proportion of “intangible assets” of S&P 500 companies, assets tied to reputation, brand and intellectual property rather than evaluable tangible assets, have reached record highs. Analysis of financial metrics simply won’t suffice anymore in our view.

Chart 3: Asset opacity in the US is at an all-time high
S&P 500 intangible assets as a percent of book value, 1998-2018

4. Happy employees = better returns

Companies with high employee satisfaction ratings on Glassdoor.com have outperformed those with low ratings by nearly 5 percentage points a year over the past six years.

Chart 4: Companies that are ranked higher on Glassdoor have outperformed their counterparts with lower ratings by 5 percentage points per year
Cumulative relative performance (indexed to 100) when buying the top quintile* stocks and selling the bottom quintile stocks (Jan 2013 - Dec 2018, quarterly rebalancing)

5. The best signal of earnings risk we have found

Traditional financial metrics, such as earnings quality, leverage and profitability, don’t come close to ESG as a signal of future earnings volatility or bottom line risk.
Chart 5: Best signal of future earnings risk: worse ESG ranks signaled more earnings deterioration
Median change in 3-yr EPS volatility over subsequent five years based on Refinitiv Overall ESG score from 12/2005-12/2015 (with volatility through 12/2018)

Source: Refinitiv, BofA Merrill Lynch US Equity & Quant Strategy
Q1 (Best) includes stocks within the top 20th percentile based on overall Refinitiv ESG scores; Q4 (Worst) includes stocks within the bottom 20th percentile based on the overall Refinitiv ESG scores.

6. ESG could have helped avoid 90% of bankruptcies
15 out of 17 (90%) bankruptcies in the S&P 500 between 2005 and 2015 were of companies with poor Environmental and Social scores five years prior to the bankruptcies.

7. “Good” companies enjoy a lower cost of capital
Just like consumers have credit scores, companies pay different rates depending on their risk profiles. The cost of debt for “good” versus “bad” companies based on MSCI ESG scores can be nearly 2 full percentage points lower.

Chart 6: Companies with higher ESG scores tend to enjoy lower cost of capital
Weighted average option-adjusted spread (OAS) vs. MSCI overall ESG scores as of 8/2019

Source: MSCI ESG Research LLC, BofA Merrill Lynch US Equity & Quant Strategy

8. ESG “controversies” have cost investors a lot
We analyzed the performance of 24 major controversies among S&P 500 companies since 2014. Our analysis shows that those controversies were accompanied by peak-to-trough market capitalization losses of $534B, against a backdrop in which the S&P 500 grew by 7% on average.
Chart 7: More than $500bn of market value has been lost due to ESG controversies*
Average peak-to-trough performance of ESG controversy stocks relative to the S&P 500 (market cap weighted, 30 days prior to through 360 days post controversy)

Source: BofA Merrill Lynch US Equity & Quant Strategy
*includes 24 controversies related to data breaches, accounting scandals, sexual harassment and other ESG topics.

9. Climate change is top-of-mind for investors
Climate change is the #1 ESG issue for ESG asset managers according to US SIF (The Forum for Sustainable and Responsible Investment), with $3tn of ESG assets considering climate change as part of their investment decisions. According to the CDP (previously Climate Disclosure Project), $970bn worth of assets could be at risk within the next five years, based on estimates provided by 215 companies — some of the largest in the world.

Exhibit 3: Top Specific ESG Criteria for Money Managers 2018

<table>
<thead>
<tr>
<th>Climate Change/Carbon</th>
<th>Tobacco</th>
<th>Conflict Risk (Terrorist or Repressive Regimes)</th>
<th>Human Rights</th>
<th>Transparency and Anti-Corruption</th>
</tr>
</thead>
<tbody>
<tr>
<td>$3.00 Trillion</td>
<td>$2.89 Trillion</td>
<td>$2.26 Trillion</td>
<td>$2.22 Trillion</td>
<td>$2.22 Trillion</td>
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Percent Increase in Assets Affected since 2016

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<tr>
<td>110%</td>
<td>432%</td>
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<tr>
<td>47%</td>
<td>171%</td>
</tr>
<tr>
<td>206%</td>
<td></td>
</tr>
</tbody>
</table>

Source: US SIF Foundation

10. Actually, you already do care about ESG!
ESG is not new. Is management compensation aligned with shareholders? Is key talent happy or at risk of moving to a competitor? Does lax environmental behavior mean elevated legal risk? Stocks have been bought and sold on ESG concerns for decades. Today’s ESG discussions are largely focused on standardizing or codifying these elements, like we have seen for accounting and financial standards.
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<table>
<thead>
<tr>
<th>Investment rating</th>
<th>Total return expectation (within 12-month period of date of initial rating)</th>
<th>Ratings dispersions guideline for coverage cluster*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Buy</td>
<td>≥ 10%</td>
<td>≤ 70%</td>
</tr>
<tr>
<td>Neutral</td>
<td>≥ 0%</td>
<td>≤ 30%</td>
</tr>
<tr>
<td>Underperform</td>
<td>N/A</td>
<td>≥ 20%</td>
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* Ratings dispersions may vary from time to time where BoFA Merrill Lynch Research believes it better reflects the investment prospects of stocks in a Coverage Cluster.

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