The sustainability imperative

Strategies to address critical challenges in a changing world
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Highlights

- Institutional investors face growing pressure to invest sustainably—and to measure the positive environmental and social impacts of their portfolio
- Investors must meet increasingly complex sustainability goals in a low-return environment which has left many pension funds below actuarial funding targets
- Developing the right approach to new sustainability goals requires asset management expertise beyond fundamental investing—including scientific research, data collection and management

The use of ESG factors—environmental, social and governance—in investment strategies has accelerated in recent years as investors have come to understand the value of non-financial material data to risk management and performance. Especially as ESG reporting has become more widespread, investors have come to view this data as an important contributor to investment decision-making.

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One of the more recent studies of the correlation of corporate financial performance and sustainability performance found that “firms with good performance on material sustainability issues significantly outperform firms with poor performance on these issues, suggesting that investments in sustainability issues are shareholder-value enhancing.”

Dunn, Jeff, Fitzgibbons, Shaun, and Pomorski, Lukasz. “Assessing Risk Through Environmental, Social and Governance Exposures.” 2017. This paper discusses the risk and return implications of incorporating ESG considerations into investment strategy, focusing on the risk side in particular. Its conclusion: “Stocks with the worst ESG exposures have total and stock-specific volatility that is up to 10-15% higher, and betas up to 3% higher, than stocks with the best ESG exposures.”
At the same time, many pension funds are currently underfunded and are also struggling to meet actuarial funding targets in the current low yield environment. Currently, investors representing USD 62 trillion in assets under management have signed up to the UN-backed Principles for Responsible Investment, promising to support environmental goals such as carbon reduction. The Climate Risk Task Force of the Financial Sustainability Board recently published a set of recommendations for investors, lenders and insurance underwriters for better disclosure and understanding of material risks.\(^2\) We believe that these recommendations will increase awareness by all stakeholders and also accelerate ESG integration.

In the last few years investors increasingly have been asked to not only consider the sustainability practices of the companies they invest in—the original focus of ESG strategies—but to also show in a measurable way the external impact of their investments on the global environment and society. In order to help our clients fulfill this commitment, UBS Asset Management has drawn on its unique sustainable investment expertise and partnered with experts from our investment teams and across academia to help develop new measurement frameworks.

Our proprietary approach to managing data
UBS Asset Management has a long history of developing proprietary methodologies that incorporate sustainability factors into fundamental research, analysis and investment decision-making. We were early in grasping the material relevance of sustainability data to valuation analysis, and spent more than a decade developing a proprietary database and scoring methodology to integrate environmental, social and governance factors in our investment processes. At the heart of this effort is the belief that only we can decide which factors and inputs are material. This is no different from our sole reliance on internal UBS Asset Management cash flow estimates. While there are commercially available standardized ESG databases, just as there are external cash flow estimates, we wanted to ensure that we selected data we believed to be material and that we could test, correct and update internally as data evolved. This process allowed us to create an objective ESG score which is transparent, comparable, and reflects our proprietary assessment of each company’s sustainable profile.

We continue to reap the benefits of being an early mover with respect to leveraging an internal database to evaluate the sustainability of our portfolio holdings. UBS Asset Management is now leveraging and further adapting this methodology to integrate ESG factors across other asset classes.

A forward-looking approach to carbon awareness
This extensive background in ESG research and data collection provided a good background to respond when a large UK government-sponsored pension fund asked UBS Asset Management to develop a passive carbon aware product that aims to replicate benchmark returns while increasing relative exposure to companies that are adapting to a lower-carbon future.

To meet this client’s needs, we developed a proprietary framework to create a composite score for companies based on current and historical carbon data (including data uncertainties), probable carbon reduction path and forward-looking variables that gauge a company’s commitment to and engagement with emission reduction initiatives. It takes into account the “carbon glide path” required of each of the selected index’s industry sectors and companies that either need to reduce carbon intensity or are carbon neutral, such as renewable energy.

UBS Asset Management’s approach differs from the standard investment community approach of overweighting stocks of companies that are less dependent on fossil fuel, based primarily on historical or current carbon data. We believe that this approach misses the forward-looking aspirations of the global community under the Paris Accord, to increase the probability by 50% that the global temperature increase will stay at/below the “safe” level of two degrees centigrade at the end of this century.

According to the estimates of the International Energy Agency (IEA), this requires an 80% reduction in carbon emissions by 2050.

As of June 30, 2017 this client has approximately USD 229 million in assets under management in this strategy. This approach can also be extended to active systematic portfolios.

ESG’s toughest challenge: Measuring the impact of a portfolio
The newest and most cutting edge development in institutional sustainable investing is the search for ways to make a measurable impact on global environmental challenges within equity and fixed income portfolios without sacrificing financial returns.

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In a 2016 investor survey conducted by the Global Impact Investing Network, 100% said they wanted to better understand the social/environmental impact performance of their investments (see exhibit 1). Institutional impact investments accounted for less than USD 250 billion at the end of 2015, but impact investing has become one of the fastest growing ESG strategies over the last two years. We have seen a marked increase in interest from our mainstream clientele, particularly institutional asset owners. Developing a consistent and accurate framework for measuring the impact of an investment portfolio is the next evolution of sustainable investing in our opinion.

Conclusion: A legacy of pioneering sustainability research

As institutional investors take the next logical step and seek to measure their impact on critical global environmental and social challenges, UBS Asset Management’s legacy of ESG research and data development forms a solid foundation for developing a new type of framework to measure results. The following pages give details on a groundbreaking impact measurement framework UBS Asset Management is developing in partnership with academic experts in the scientific community.

From the Global Impacting Investing Network: A note on ESG and impact investing

Many investors (including impact investors) select and monitor investments based on their environmental, social, and governance (ESG) performance. Investors value these factors as indicators of corporate responsibility, industry leadership, and robust risk management. ESG factors pertain primarily to the functioning of a business—for example, efficient use of natural resources, hiring policies, and board composition. While ESG and external social/environmental impact are distinct concepts with different metrics, in practice there is naturally some overlap between the two. Indeed, many impact investors consider both relevant to the measurement of their total impact.
Exhibit 1: Measuring investment impact is an investor requirement

It is part of our mission to understand the social/environmental performance of our investments (n=155)

Very important: 95
Somewhat important: 65
Not important: 4

We want to better understand and improve the impact performance of our investments (n=153)

Very important: 81
Somewhat important: 59
Not important: 27

We are contractually committed to report to our stakeholders on social/environmental performance (n=131)

Very important: 65
Somewhat important: 59
Not important: 27

We believe such data has business value, i.e. can improve financial performance of portfolio companies and inform future investment decisions (n=153)

Very important: 59
Somewhat important: 48
Not important: 38

We need to communicate our impact for marketing purposes (n=147)

Very important: 44
Somewhat important: 46
Not important: 48

There is growing external pressure (e.g. due to changing norms, stakeholder scrutiny) to track social/environmental performance (n=138)

Very important: 25
Somewhat important: 46
Not important: 29

Case study

Measurable impact

Institutional investors are stepping up commitments to reduce carbon footprints and support social and environmental goals. Many are asking for strategies that prove their good intentions are producing results. There is a growing need for sophisticated ways to accurately measure and support the positive impact of investment decisions.

**Case:** In 2015, a major EU pension fund approached UBS Asset Management and asked for an equity impact strategy that fulfilled three investment criteria:

– Equities in the portfolio must provide products and services aligned with the UN’s Sustainable Development Goals focused on climate change and air pollution, access to clean water, food security, health, and poverty alleviation, based on a revenue analysis;

– Are attractively valued;

– Demonstrate strong operational sustainability performance, based upon UBS Asset Management’s proprietary ESG scoring methodology

**Our approach:** In order to fulfill this mandate, UBS Asset Management worked with scientists at two premier academic institutions to develop a measurement framework to quantify the positive impacts of equities held in a portfolio. At the same time, the framework would provide direction for engaging with these companies to influence them to increase their positive impact on society and the environment. This approach relies on a variety of data sources, including publicly available data from companies, regulators, scientific publications and UBS Asset Management’s analytical resources.

The measurement framework incorporates information on each holding’s business activity, outputs, outcomes and impact. (See exhibit 1.)

**Result:** As of August 31, 2017, UBS managed approximately USD 2.1 billion in this impact mandate and will soon launch new investment vehicles leveraging this methodology. Investors in this strategy will receive regular reports that estimate the impact of their portfolios on targeted environment and social challenges. Exhibit 2 is the green impact report (June 2016 – June 2017) of our existing Customized Impact Equity portfolio.
Exhibit 1: Measurement framework

<table>
<thead>
<tr>
<th>Business activity</th>
<th>Outputs</th>
<th>Outcomes</th>
<th>Impacts</th>
</tr>
</thead>
</table>
| Revenue segmentation by renewable/energy efficiency technology and country | • Installed capacity in renewables (GWh)  
• Annual total electricity generated (GWh)  
• Annual energy savings (GWh, MPG) | • Avoided emissions (tonnes)  
• CO₂e  
• Air pollutants | • Illness avoided (morbidity)  
• Deaths avoided (mortality) |
| Revenue segmentation by water treatment and country | • Annual drinking water treatment  
• Annual wastewater treatment | • Annual clean water additions weighted by beneficiaries  
• Annual clean water additions weighted by location (to river) | • Customers served by additional clean water (drinking water)  
• Downstream people fully served by clean water additions (wastewater)  
• Beneficiary downstream protected area |
| Revenue segmentation by water efficiency technology and country | • Annual water savings (m3) | • Annual water savings weighted by beneficiaries | • People served by meters  
• People that can be fully served by saved water |
| Revenue segmentation by drug and country | • # drug treatments per top 20 Global Burden of Disease | • # patients under treatment for each drug | • Deaths prevented  
• Hospitalizations avoided  
• Sick days avoided |

Exhibit 2: Customized Impact Equity Portfolio
(June 2016 – June 2017)

<table>
<thead>
<tr>
<th>Customized Impact Equity Portfolio (30.6.17)</th>
<th>Volume water treated or saved (million m³/yr)</th>
<th>Drinking water (Volume treated) (million m³/yr)</th>
<th>Waste water (Volume treated) (million m³/yr)</th>
<th>Drinking water (people served)</th>
<th>CO₂ avoided (million metric tons)</th>
<th>Lives saved</th>
<th>Hospitalizations prevented</th>
<th>Sick days prevented</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total portfolio</td>
<td>6133</td>
<td>1512</td>
<td>1083</td>
<td>41,007,000</td>
<td>221</td>
<td>369,133</td>
<td>2,182,095</td>
<td>450,286,476</td>
</tr>
<tr>
<td>Recent portfolio holding</td>
<td>44</td>
<td>11</td>
<td>8</td>
<td>312,153</td>
<td>0.61</td>
<td>156</td>
<td>874</td>
<td>329,208</td>
</tr>
</tbody>
</table>
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