2016 BUSINESS AND BIODIVERSITY FORUM

Mainstreaming Biodiversity: Opportunities for Businesses

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COP 13
Moon Palace Hotel, Cancun, Mexico

Lorenzo J. de Rosenzweig Pasquel
Integrating conservation and sustainable use of natural capital in business planning and operation.

A significant gap remains in finance for biodiversity conservation and management.

Global investment required amounts to between 130 and 440 billion US$ annually.

¿How could the productive and financial sectors better engage into biodiversity conservation and sustainable use?

Address financial mechanisms that consider guidelines on biodiversity conservation and sustainable use, applicable to the private sector, as well as discuss investment opportunities and innovative instruments to scale up involve the private sector in biodiversity finance.
¿Why is it important to mainstream biodiversity?
¿Why is it important to mainstream biodiversity?

1995, 33 trillion dls x year

2011, 125-143 trillion dls x year (GDP =75.2 t per year)

Estimated value of ES provided to humanity

R. Costanza, 1994-2014
Índice de Desarrollo Humano ajustado por la Desigualdad (IDH-D) de las Naciones Unidas
Fig. 1. Interaction between built, social, human and natural capital required to produce human well-being. Built and human capital (the economy) are embedded in society which is embedded in the rest of nature. Ecosystem services are the relative contribution of natural capital to human well-being, they do not flow directly. It is therefore essential to adopt a broad, transdisciplinary perspective in order to address ecosystem services.

Source: Oxfam. The 11 dimensions of the social foundation are illustrative and are based on governments’ priorities for Rio+20. The nine dimensions of the environmental ceiling are based on the planetary boundaries set by Rockström et al (2009b)

4 A Safe and Just Space for Humanity Oxfam Discussion Paper, February 2012
But what is Sustainable Investing (SI)?

**Negative Screen / Avoidance Strategies**

**Screening**
- Utilizes screening criteria to exclude certain companies or industries within an investment portfolio.
- Common negative screens include those for fossil fuels, tobacco, alcohol, nuclear power, and weapons.

**Divestment**
- Full or partial divestment of certain investment holdings to achieve specific social or political goals or objectives.
- Well-known divestment campaigns include those focused on fossil fuel companies and companies doing business in Sudan.

**Proactive / Targeted Strategies**

**ESG Investing**
- This involves integrating company performance on environmental, social and governance (ESG) criteria into investment decision-making.

**Impact Investing**
- Investments made in companies, organizations and funds with the intention to generate positive impact alongside a financial return.
- In addition to financial returns, impact is assessed periodically to evaluate the success of the investment.
Does Sustainable investing leave money on the table?

- Returns on the MSCI KLD 400 Social Index have been competitive with its traditional parent index, MSCI USA IMI
- Academic studies have made the investment case for socially responsible investing
- An Empirical Research Partners study concluded that on average, stocks with good ESG credentials beat those with poor scores while also achieving their non-financial, ESG-related goals

<table>
<thead>
<tr>
<th>Cumulative Index Performance¹</th>
<th>MSCI KLD 400 Social Index¹</th>
<th>MSCI USA IMI Index</th>
<th>S&amp;P 500 TR Index</th>
</tr>
</thead>
<tbody>
<tr>
<td>Performance (Since inception annualized returns for the ESG Indices)</td>
<td>9.5%</td>
<td>9.4%</td>
<td>9.3%</td>
</tr>
<tr>
<td>MSCI EAFE ESG Index²</td>
<td>7.7%</td>
<td>MSCI EAFE Index</td>
<td>6.5%</td>
</tr>
<tr>
<td>MSCI ACWI ESG Index³</td>
<td>2.7%</td>
<td>MSCI ACWI Index</td>
<td>1.8%</td>
</tr>
</tbody>
</table>


Sources: Morningstar, MSCI. Past performance is no guarantee of future results. It is not possible to invest directly in an index. See Appendix for Index Definitions. For illustrative purposes only. Actual performance in a client’s specific investment may differ substantially from the performance of the indices noted herein.
Sustainable Investing (SI) assets are $21.4T globally and growing...

Total professionally managed global financial assets (ST)

SI
Non-SI

CAGR 7%

2012 71
2014 71

SI assets ($T)

CAGR 27%

2012 13
2014 21
% of total assets
2012 21.5%
2014 30.2%

Non-SI assets ($T)

CAGR 1%

2012 48
2014 49
% of total assets
2012 78.5%
2014 69.8%

JP Morgan
While the majority of SI assets are in Europe, the U.S. market and retail segment have experienced strong growth.

### Assets by region ($T)

<table>
<thead>
<tr>
<th>Year</th>
<th>Europe</th>
<th>U.S.</th>
<th>Other</th>
</tr>
</thead>
<tbody>
<tr>
<td>2012</td>
<td>13.3T</td>
<td>6%</td>
<td>66%</td>
</tr>
<tr>
<td>2014</td>
<td>21.4T</td>
<td>31%</td>
<td>24%</td>
</tr>
</tbody>
</table>

### Assets by SI category ($T)

<table>
<thead>
<tr>
<th>Year</th>
<th>Shareholder activism</th>
<th>Themed and impact</th>
<th>ESG integration</th>
<th>Pos. screening</th>
<th>Neg. screening</th>
</tr>
</thead>
<tbody>
<tr>
<td>2012</td>
<td>17%</td>
<td>31%</td>
<td>47%</td>
<td>20%</td>
<td>18%</td>
</tr>
<tr>
<td>2014</td>
<td>1%</td>
<td>31%</td>
<td>47%</td>
<td>16%</td>
<td>35%</td>
</tr>
</tbody>
</table>

Source: GSIA, S&P’s Money Market Directories (MMD) - 2013, UK Charities Commission; Philanthropic Foundations Canada, Salesforce.com

1. Percentages calculated based on double counting method and applied to actual total SI assets. Includes double counting where assets are included in multiple categories. Total global SRI assets: $21T, which is 30% of total global professionally managed assets.
Attitudes on Sustainable Investing

- An estimated $15 Trillion will be transferred between generations over the next two decades
- Younger generations, particularly millennials, are interested in investments that are in line with their personal values
- Further, they are confident that their investments can have a social impact while maintaining market-rate returns

“*My investment decisions express my social, political, or environmental values*”

- Overall: 43%
- Age 69+: 34%
- Baby Boomers: 36%
- Gen X: 44%
- Millennials: 67%

“*It is possible to achieve market-rate returns investing in companies based on their social or environmental impact*”

- Overall: 60%
- Age 69+: 47%
- Baby Boomers: 58%
- Gen X: 61%
- Millennials: 73%

Source: 2014 U.S. Trust Insights on Wealth and Worth (based on nationwide survey of 680 high-net-worth and ultra-high-net-worth adults with at least $3 million in investable assets), J.P. Morgan Philanthropy Centre
Financing the **green** and **blue** economies

**Spectrum of Social and Financial Objectives**

- **Type**
  - Pure Social
  - Venture Philanthropy
  - Program-Related Investing

- **Investment Approach**
  - Philanthropic Donations: Pure charitable giving with no expectation of financial return.
  - Donations: Donations are given as seed capital with the expectation of operational sustainability through mentoring by investors.
  - Return of at least the principal is expected; possibility of market return, as well as of social performance.

**Impact Investing**

- Investments in companies whose primary goal is delivering social and environmental good, whilst also delivering competitive market returns.

- ESG Investments: Limiting investments to companies who track and evaluate their performance against key environmental, social and governance metrics.

- Socially-Responsible Investments: “Do no harm” investing in listed stocks that avoid ethically and environmentally questionable companies (e.g., tobacco, coal, casinos).

- Traditional Investments: 100% driven by maximisation of short-term financial gain.

**Source:** AvantEdge Ventures Analysis 2011

- Habitat restoration (mangroves, coral reefs)
- Fisheries (recovery, sustainable practices, marketing)
- Tourism
- Other, sustainable sources of income
Sustainable investing has seen growing interest and commitment.
INVESTING FOR SUSTAINABLE GLOBAL FISHERIES

With support from:
Bloomberg Philanthropies' Vibrant Oceans Initiative
The Rockefeller Foundation

SMALL-SCALE FISHERIES SEAFOOD SUPPLY CHAIN

<table>
<thead>
<tr>
<th>HARVEST</th>
<th>HANDLING</th>
<th>COLD CHAIN/TRANSPORT</th>
<th>PROCESSING</th>
<th>DISTRIBUTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fisheries Management Improvements</td>
<td>Seafood Distribution Companies</td>
<td></td>
<td></td>
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</table>

- Conduct traceability
- Use gear types that aid in packaging to the products
- Provide cooling on the vessel
- Increase handling and storage to avoid building and heating
- Provide shorter freezing and storage

- Construct buying stations
- Build high-quality sorting and grading facilities
- Use modern and cold-trimmed systems
- Provide product training and traceability

- Construct and use modernized freezing techniques
- Use hygiene and food safety systems to avoid contamination throughout the life of the product
- Utilize quality packaging and labeling
- Provide product tracking and traceability

- Cultivate transparency to the consumer
- Foster sustainability, quality, and food safety
- Provide product tracking and traceability
- Expand to new markets

JP Morgan
Investing in the blue economy
Growth and opportunity in a sustainable ocean economy

A discussion paper by the Economist Intelligence Unit

Mesoamerican Reef (MAR) Project – A Vision for the Future
September, 2016

The Mesoamerican Reef (MAR), which stretches across the Caribbean coasts of Mexico, Belize, Guatemala, and Honduras, is one of the richest and most diverse marine ecosystems in the world. It endures, in blue waters, threats to its health and those of the local communities and economies that depend on it. By effectively addressing these threats through a clear alliance of governments and civil society, the potential to set a global example of how nations can thrive sustainably alongside their environment.

There is a vital link between healthy ecosystems, stable livelihoods and the wellbeing of communities. National environmental authorities play a central role in the development of strategic and effective solutions to critical environmental issues. The 35th meeting of the Conference of the Parties to the Convention on Biological Diversity in 2014, as well as the upcoming 20th anniversary of the Future Agreement in 2017, represents an opportunity to advance current achievements in conservation and key challenges for the future, as well as to demonstrate how decision-makers and regulators can contribute to the critical task of aligning the MAR region’s economic trajectory with its unique and precious marine resources.

When the heads of state of Belize, Guatemala, Honduras and Mexico signed the Future Agreement nearly 20 years ago, they agreed to promote the conservation of the Mesoamerican Reef (MAR). System through its sustainable use, thereby contributing to the welfare of present and future generations. Two decades on, it is now an opportunity for us to restate and plan for the continuing conservation of this globally important region. The Mesoamerican Reef region is world renowned for its diverse coastal wonders, as well as its rich cultural and ethnic diversity. Its macro- and microhabitats, stretching from high-gradient mountainous to deep oceanic shelves, provide vital habitats breeding areas, migrations, nurseries and nurseries for a vast array of species. Our coastal and marine resources include large expanses of mangrove forests and extensive shallow Arctic that support important fisheries; and some of the best remaining reefs in the Caribbean, which protect our shoreline, our coastal communities and underpin our tourism and fisheries industries.
Cuatro modelos de flujo de efectivo en materia de financiamiento de conservación

<table>
<thead>
<tr>
<th>Type</th>
<th>Cash flow pattern</th>
<th>Examples</th>
</tr>
</thead>
<tbody>
<tr>
<td>Invest up front, manage, and sell</td>
<td></td>
<td>Buy degraded farmland, restore, and sell</td>
</tr>
<tr>
<td>Invest up front and generate recurring returns</td>
<td></td>
<td>Buy shrimp farms, convert to sustainable operations, capture returns</td>
</tr>
<tr>
<td>Invest gradually and build returns</td>
<td></td>
<td>Help fishermen fish sustainably (net size change, etc.) and capture part of incremental returns</td>
</tr>
<tr>
<td>Invest continually and generate recurring returns</td>
<td></td>
<td>Invest in upstream watershed protection and receive payment from downstream water users</td>
</tr>
</tbody>
</table>

Fuente: Conservation Finance, From Niche to Mainstream: The Building of an Institutional Asset Class
Diversificación productiva, pesca responsable y conservación de la vaquita (*Phocoena sinus*) en el Alto Golfo de California
Borders?
I have never seen one.
But I have heard they exist
in the minds of some people.

Thor Heyerdahl