European Commission
Promoting Sustainable Investment Conference

ECO-LABELING, INTENTIONALITY, AND THE LANDSCAPE OF SUSTAINABLE INVESTMENT

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OUTLINE

• The Role of Government
• The Landscape of Sustainable Investment

• Impact investing research: measuring intentionality for different investor types

• SASB vs voluntary
THE ROLE OF GOVERNMENT

In the past few months, I’ve given talks on Responsible / Sustainable Investment at:

• UNPRI & IFC
• Ministry of Finance of Norway (Oil Fund Experts Board), Panel of U.S. state pension funds, (similar views: CalPERS)

• The NGOs want to maximize capital that is invested at least responsibly
  • (Generation 2: Make inferences about impact)

• The State Funds want to be good fiduciaries to their citizens
  • Understand risk management in a sustainable sense matters
  • Reflect priority principles of their citizens through divestment, voting, etc.
THE ROLE OF GOVERNMENT

At face value, the first order goal of the EC is like the NGOs -- to increase capital flowing to sustainable investments, in particular to resolve climate challenges.

Summary of EC agenda (way too simplified):

- Let’s broaden and certify friction points of sustainability (taxonomy)
- Let’s improve disclosure
  1. To force institutional investors to consider and report long-horizon exposures
     (This makes assumptions about the current-to-future pricing of these exposures.)
  2. To remove green-washing
  3. To allow companies and investment opportunities to benefit from easier promotion of their sustainable benefits to attract capital
  4. To allow people to invest with their beliefs
<table>
<thead>
<tr>
<th>Challenge</th>
<th>Action</th>
<th>Category</th>
</tr>
</thead>
<tbody>
<tr>
<td>Too little information on corporate sustainability-related activities</td>
<td>Enhancing non-financial information disclosure</td>
<td>Long-termism in governance</td>
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<tr>
<td>No common definition of ‘sustainable investment’</td>
<td>EU classification (taxonomy) for sustainable activities</td>
<td>Reliable information</td>
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<td>Risk of ‘greenwashing’ of investment products</td>
<td>Standards and labels for ‘green’ financial products give investors certainty</td>
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<td>Banks and insurers often give insufficient consideration to climate and environmental risks</td>
<td>Study if capital requirements should reflect exposure to climate change and environmental risks</td>
<td>Sustainability and risk management</td>
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<tr>
<td>Investors often disregard sustainability factors or underestimate their impact</td>
<td>Clarify institutional investor duties to consider sustainable finance when allocating assets</td>
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</table>
THE ROLE OF GOVERNMENT

These disclosure and taxonomy agenda items are important.

But I want to argue for “necessary but not sufficient”
• To achieve goal of more private capital solving (e.g.) climate challenges
• To benefit the people the EC represents

Gist: The landscape of sustainable investment involves different levels of intentionality about return optimization. Omission of this eco-labeling implies:
1. People will not be optimized for themselves without having more transparency.
2. Fiduciary capital cannot enter without a transparent landscape.
3. Packaging among investors cannot happen without transparency.
Wildly different views of returns

**NGOs:**
- Prone to promoting “doing well by doing good” because of the increasing sustainable capital flows agenda, even when the expected returns are non-controversially below market.

**State Funds:**
- Compelled by fiduciary duty to be skeptical of investment opportunities that deviate from the wisdom of the market.
- The evidence (Pedro Matos—later today) is not (yet) convincing that:
  - Climate risk is a priced macro factor, versus
  - vs alternative that returns to sustainability disclosure reflect a one-time quality updating.
THE ROLE OF GOVERNMENT

How NGO-like eco-labeling without intentionality perspective on returns might fail. (Note: NGO view is aligned with financial intermediaries on this.)

Examples

1. *The Sham Startup*: A FinTech ESG Investing Platform (often targeting millennials) has double layers of transaction costs to provide platform-like SRI opportunities.

2. *The Naïve Stock Picker*: An SRI mutual fund invests only in 10 “hot” green stocks, incurring huge unpriced risk for clients.

3. *The Hidden Exposure Fund*: An SRI fund eliminates fossil fuels but instead excess loads on smelting and airline securities to re-weight toward fossil fuels.

4. *The Blending Impact Investor*: A Sustainable VC Fund packages (for marketing market-rate returns + optimized impact):
   - A for-profit, non-impacting investment in transportation
   - An investment in a subsidy-needling regional housing investment
THE ROLE OF GOVERNMENT

Examples are motivating but are not the crux of the friction to solving the twin goals:

- To achieve goal of more private capital solving (e.g.) climate challenges
- To benefit the people the EC represents

Landscape view helps....
Landscape of sustainable investment opportunities & Intentionality

I. Categorization
II. What do we know about returns?

Let’s start by understanding the notion of intentionality.
I.1. Definition in economic terms:

**Intentionality** over a return goal is the act of including that goal in an optimization that determines decisions over operations.

e.g.: The definition of *Impact Investment* is

Monitor group:
“… actively placing capital in businesses and funds that generate social or environmental good and at least return nominal principal to the investor”

Global Impact Investing Network (GIIN):
“… is an exciting and rapidly growing industry powered by investors who are determined to generate social and environmental impact as well as financial returns.”
I.2. Intentionality & New Capital

Is the agenda of EC tied to creating new capital for intentionality in impact (particularly climate)?

Or just to promote the idea of mobilizing sustainability as a priced risk factor just that firms with financial-only intentionality will include sustainability for financial reasons (only) in their decisions over operations.

To me… the EC stance at the moment seems locked trying to do the second, but with concerning implications for the first.
I.2. Intentionality & New Capital

Example of misrepresentation of intentionality in impact

- *Is an investment in a very **impacting sector** which would have been made for profit reason without any sustainable investor capital to be eco-labeled?*

- *Example: Investing in purely for-profit health-tech (most of recent IPOs), ener-tech, transportation… “The sustainable money invested has not increased overall capital” (essence of Paul Brest, Stanford)*

- *I would say that it needs a different eco-labeling*
Impact Investment

Sustainable Investment (Broad Definition)

Philanthropy

Grants
(i) Venture Philanthropy,
(ii) Negative Return Subsidized Loans

(i) Social Impact/Mission Funds, (ii) Development Bonds

(i) SRI Mutual Funds below market, (ii) RI Asset Management Below Market
(iii) Double Bottom Line VC,
(iv) Some Green Bonds

(i) SRI/RI Mutual Funds in Equities & Bonds,
(ii) Responsible Investment Institutional Portfolios,
(iii) Impact Sectors VC/PE,
(iv) Real Asset Classes (timber, land)

These have negative expected financial returns.

These have lower than market expected financial returns.

These aim for market-rate financial returns

Social Returns
Impact Intentionality
Investment Returned

Impact Investment
Dual Intentionality

Responsible Investing
Financial Intentionality

Market Rate Expected Financial Returns
Financial Returns
I.3. SRI / RI Investment

The vast, vast majority of the money is in the red category.

Observation 1: SRI/RI stock funds have performed at the market rate last ~20 yrs.

How? (we don’t know):

a. New disclosure on the quality of companies
   - More sustainable risk management
   - Better governed (hundreds of papers)
   - Better labor (Alex Edmans)

a. A sustainability factor is not being priced
   - Lack of information?
   - Macro fundamental

b. ESG investing loading on existing priced factors

Important: (a) implies any excess returns are a one-time event.

Will next generation (post-disclosure) SRI money flee?
SIDE NOTE ON LONG HORIZON APPROACHES

Revisit: The long-horizon point in red from this earlier slide

To increase capital flowing to sustainable investments:

• Let’s improve disclosure
  1. To force institutional investors to consider long-horizon exposures
  2. ...

CalPERS is trying to bridge the verbal difference between NGOs and State funds.

• Since CalPERS has immense pressure on both “sustain the world” and on “fiduciary” fronts, it is interesting how they convey
CalPERS publishes “investment beliefs” that incorporate a utility perspective of asset allocation

1) Incorporate background risk (in their case, liabilities) into portfolio construction

2) Allow for utility impact of actions on future generations

3) Allow for wider stakeholder utility

   Consideration of stakeholder issues (e.g., climate, labor) based on whether
   - principle of issue is a policy objective
   - materiality of issue to impact portfolio performance
   - CalPERS capacity to tackle issue

4) Claim: Value comes from managing interests (returns & responsibility) in financial, physical and human capital

5) Risk measurement is not fully captured by tracking error
   - Risks include factors like LT climate change that may impact on returns
**CALPERS: Financial, Physical & Human Capital**

**Financial Capital** = Alignment of interests requires good governance
- Policy reform involvement, voting, engagement, divestments

**Physical Capital** = Encourage firms to engage in responsible practices
- Encourage reporting to SASB
- Joining initiatives pressuring firms to address climate change

**Human Capital** = Value of companies affected by their labor practices
- Engagement on issues like labor contracting, compensation, diversity
I.3. SRI / RI Investment

The vast, vast majority of the money is in the red category.

**Observation 2:** We do not know how much impact has resulted.

And yet intentionality suggests that the firm should not exert effort to collect such information for market-rate SRI investments.

Leaves an unsatisfactory setting.
Observation 3:
Since truthful disclosure on intentionality in impact is hard to elicit, regulators should require standardized disclosure on sustainable portfolio construction processes:

Example of disclosure items:
- Screening /fundamentals methodologies
- Portfolio materiality of exclusions,
- Diversification metrics,
- etc.
These give investor mapping to intentionality

(i) SRI Mutual Funds below market, (ii) RI Asset Management Below Market
(iii) Double Bottom Line VC,
(iv) Some Green Bonds

(i) SRI/RI Mutual Funds in Equities & Bonds,
(ii) Responsible Investment Institutional Portfolios,
(iii) Impact Sectors VC/PE,
(iv) Real Asset Classes (timber, land)
EXAMPLE OF SRI DISCLOSURE NEEDED

From a slide by a wealth management firm Patrick Geddes

- This is not news to anyone, but the magnitude difference is instructive
- Two different nonviolence portfolios

<table>
<thead>
<tr>
<th>Value Set</th>
<th>Screens</th>
<th>Tracking Error vs Russell 3000</th>
<th># of Stocks Excluded</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nonviolence</td>
<td>Avoid companies contracting with Dept of Defense</td>
<td>2.84%</td>
<td>853</td>
</tr>
<tr>
<td>idealistic</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nonviolence</td>
<td>Avoid weapons</td>
<td>0.41%</td>
<td>61</td>
</tr>
<tr>
<td>pragmatic</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Impact Investment

Sustainable Investment (Broad Definition)

Social Returns

Market Rate Expected Financial Returns

Financial Returns

Observation 4:

****IMPORTANT*********

Now imagine the purple and red are comignled. Investors in orange have fiduciary duty and may not be able to invest, depending on country of origin.

Vehicle Examples

Returns

Labels

(i) SRI Mutual Funds below market,
(ii) RI Asset Management Below Market
(iii) Double Bottom Line VC,
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(i) SRI/RI Mutual Funds in Equities & Bonds,
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Impact Investment

Responsible Investing

Sustainable Investment (Broad Definition)

I.3. SRI / RI Investment

Foundations, Philanthropists & NGOs

Households

Governments

Regulated Pensions, Corporations, Endowments

Social

Returns

$I$
Commingling is even more severe in other asset classes. Impact VC funds like to define Impact Investing broadly to be able to sell both continuing impact successes and big financial successes.

- Inhibits more capital from flowing to impact from fiduciary duty investors
- Also inhibits financial packaging that increases investment

Grants
(i) Venture Philanthropy, (ii) Negative Return Subsidized Loans

(i) Social Impact/Mission Funds, (ii) Development Bonds

(i) SRI Mutual Funds below market, (ii) RI Asset Management Below Market (iii) Double Bottom Line VC, (iv) Some Green Bonds

“IMPACT INVESTING”

Research paper with Brad Barber & Ayako Yasuda

- Winner of the 2016 Moskowitz Prize

- Study Impact VC funds with explicit dual objectives in order to uncover willingness to pay
  - And to answer: Who has the willingness to pay
  - Note: willingness does not have to be an explicit utility over social goods
“Bridges Ventures is a UK-based private equity firm with the aim of combining financial returns with social and environmental impact.

**Limited Partner Investors (LPs) in Bridges:**
- 3i (Institutional Asset Manager)
- All Souls College Oxford (Endowment)
- Department for Business Innovation & Skills (Government)
- HSBC Group (Bank)
- Barclays Bank (Bank)
- South Yorkshire Pensions Authority (Public Pension)
- Shine Trust (Foundation)
- Wittington Investments (High Net Worth Family)
Slides I am not showing you:

- Impact Funds are as likely to be **Local Community Development** as they are **Poverty** or **Green Energy**

- This matters because some types of invest you would not expect (banks and public pensions) invest quite a bit in **home-biased local development**
Impact vs. Traditional VC by Industry
IMPACT VS. TRADITIONAL VC BY REGION

North America: 50% VC, 33% Impact
Developed Europe: 23% VC, 18% Impact
Emerging Europe: 6% VC, 9% Impact
Africa: 23% VC, 3% Impact
Central and South America: 12% VC, 3% Impact
Developed Asia-Pacific: 17% VC, 14% Impact
Emerging Asia-Pacific: 7% VC, 1% Impact
Middle East: 3% VC, 0% Impact
IMPACT CATEGORIES:
% of Funds with Attribute (multiple entries allowed)

- GEO: Geography (excluding poverty) 33%
- FIN: SME Funding 42%
- INF: Social Infrastructure Development 16%
- SOC: Social Concern Impact 27%
- POOR: Poverty Alleviation 43%
- MOW: Minorities and Women Funding 11%
- ENV: Environmental Impact 28%
# Fund Descriptive Statistics:

Preqin Data Covering 3,500 LP investors from 1995-2014

<table>
<thead>
<tr>
<th></th>
<th>Traditional VC Funds</th>
<th>Impact Funds</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N</td>
<td>Mean</td>
</tr>
<tr>
<td>Vintage Year</td>
<td>4500</td>
<td>2005.4</td>
</tr>
<tr>
<td>Fund Size ($mil)</td>
<td>4000</td>
<td>204.6</td>
</tr>
<tr>
<td>Capital Commit ($mil)</td>
<td>2717</td>
<td>22.2</td>
</tr>
<tr>
<td>IRR (%)</td>
<td>1207</td>
<td><strong>11.6</strong></td>
</tr>
</tbody>
</table>
## REALIZED PERFORMANCE

<table>
<thead>
<tr>
<th></th>
<th>(1) IRR</th>
<th>(2) IRR</th>
<th>(3) IRR</th>
<th>(6) VM</th>
<th>(9) Rank</th>
</tr>
</thead>
<tbody>
<tr>
<td>Impact</td>
<td>-7.89**</td>
<td>-9.94***</td>
<td>-4.73*</td>
<td>-0.36**</td>
<td>-0.08**</td>
</tr>
<tr>
<td></td>
<td>[3.705]</td>
<td>[2.638]</td>
<td>[2.616]</td>
<td>[0.164]</td>
<td>[0.036]</td>
</tr>
<tr>
<td>Observations</td>
<td>1,283</td>
<td>1,252</td>
<td>1,252</td>
<td>1,518</td>
<td>1,563</td>
</tr>
<tr>
<td>R-squared</td>
<td>0.004</td>
<td>0.146</td>
<td>0.166</td>
<td>0.131</td>
<td>0.068</td>
</tr>
</tbody>
</table>

**Controls:**
- Vintage Year FE: NO YES YES YES YES YES
- Log(Fund Size): NO YES YES YES YES YES
- Log(Sequence): NO YES YES YES YES YES
- Fund Geo. FE: NO NO YES YES YES YES
- Fund Industry FE: NO NO YES YES YES YES

**Notes:**
- **:** Significant at the 10% level
- ***:** Significant at the 1% level
WHO HAS A WILLINGNESS-TO-PAY?

Use a different methodology which first estimates expected returns at a fine level and then looks at the investment decisions to determine the ex ante willingness to pay implied by the investment decision (does not rely on ex post returns)

- Overall: Investors have an ex ante WTP of 2.9% to 4.2% IRR
  - Estimation is not subject to sample returns observability concern
- WTP by Region
  - Prior Literature evidence suggests Europeans have higher WTP
  - We find: 3X higher European WTP
- WTP by LP Types
  - We find significant WTP by:
    1. Development Organizations
    2. Public Pensions
    3. Financial Institutions
Then we look within investor types across geography to uncover what hindrances or inducements increase or decrease willingness to pay.
Financial Packaging Example

Sustainable Investing seems ripe for an explosion in packaging arrangements.

Hindrance is truth-telling to gauge need for first loss capital.

Blue Forest Conservation Notes

- **Debt Investors**: (foundations investment portfolios, HNW private clients)
- **Equity Investors**: (Manager, Stakeholders and other equity investors)
- **SPV** (managed by EKO Asset Management Partners)
- **Forest Management Operations**: USDA approved service provider
- **Contracted Cash Flows**
- **Water Benefits**
- **Fire Suppression Benefits**
SASB versus Voluntary Approaches

I had an interesting conversation yesterday about the U.K. new regime in which fiduciary managers can use, at their discretion, ESG in portfolio construction

- Concern is that these managers are NOT taking into account a climate factor (disclaimer: emphasize that factor returns yet unproven)

U.S. perspective:

- Which exposures at a firm level (industry level) are material for returns matters!
- Imagine the opposite concern:
  - Investment managers have belief over a certain “EGS” agenda and overweight portfolio to non-material exposures
  - Cannot use threat of breach of fiduciary duty as a ex ante prevention
  - End up with “free-for-all” and some bad outcomes will cause a scandal against ESG
SASB versus Voluntary Approaches

SASB: Sustainability Accounting Standards Board:

- Michael Bloomberg
- Idea: Supreme Court: companies must disclose material information
  - What is material for each company is unique BUT
  - SASB can offer guidance by industry for (my word: “minimum”) disclosure
    - See next slide

This definition of materiality gives fiduciary investment managers a ‘fixed point” for doing sustainable portfolios

- In my mind, this solves the problem on the prior page of bad portfolio construction
- AND mobilizes the money of conservative risk management fiduciaries
<table>
<thead>
<tr>
<th>Environment</th>
<th>Biotechnology</th>
<th>Pharmaceuticals</th>
<th>Medical Equipment and Supplies</th>
<th>Health Care Delivery</th>
</tr>
</thead>
<tbody>
<tr>
<td>GHG emissions</td>
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<tr>
<td>Air quality</td>
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<td>Energy management</td>
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<td>Fuel management</td>
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<td>Water and wastewater management</td>
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<td>Waste and hazardous materials management</td>
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<tr>
<td>Biodiversity impacts</td>
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<tr>
<td>Social Capital</td>
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<tr>
<td>Human rights and community relations</td>
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SOME PUNCHLINES

Some “wish-list” items we covered

1. (****) Labeling approaches to sustainable portfolio construction for:
   • Asset manager funds
   • Mutual funds
2. Differentiate impact sector (not new capita) vs dual objective intentionality assets
   • Is the intentionality over impact movement achieving mobilization?
   • Can we do more with financial packaging?
3. Understanding different investor appetite for intentionality and making use of this
   • Can we do more with financial packaging?
4. SASB implementation

Researchers: Almost any of these areas are open for research

• Policy-makers: help the research – let’s do some roll-out experiments to understand mobilization of capital