Research Findings: Incorporating ESG Factors into Fixed Income Investments

Investing for Impact: An Example Using the World Bank

Building Sustainable Capital Markets
Incorporating Environmental, Social and Governance (ESG) Factors into Fixed Income Investments

Research Findings
A Partnership for ESG Leadership in Fixed Income

- Research on incorporation of ESG into fixed income
- Extensive literature review
- Interviews with key stakeholders

- World Bank is a leading sustainable/impact investor
- Necessary to consider sustainability to achieve goals

- Financial system has a role to play
- Integrating sustainability into operations—costing positive and negative externalities—can re-orient resources to inclusive and sustainable activities
Consultation with 30+ organizations

Asset managers and institutional investors

Rating agencies, data providers, standard setters
Main findings

Academic research provides rationale for taking ESG into account

Incorporating ESG does not mean having to sacrifice returns

ESG factors are material credit risk
The landscape of the academic research

✓ Many studies assess the empirical link between ESG and financial indicators

✓ Previously much research focused on equities (Dimson et al. 2013 summary)

✓ Growing focus on fixed income

✓ Evaluation of a comprehensive study of 2,200 studies
  • 90% find non-negative relationship between ESG and corporate financial performance
  • Bond studies (36) almost 2/3 positive 1/3 neutral or mixed
UN PRI Summary (2017)

✓ Both academic and market research supports a clear link between ESG factors and credit risk

✓ Most academic research is based on credit ratings to measure credit risk – very few papers use alternative measures (such as credit default swaps)

✓ Anecdotal observation of corporate defaults (particularly investment grade) show strong link to G. E + S harder to capture

✓ Academic research linking ESG factors + sovereign credit worthiness is less well supported – but there is much evidence that ESG factors affect macroeconomic variables and potential growth – which in turn affects sovereign credit ratings.
Qualifying Factors

- Most ESG research use past data – may not hold in future
- May be (selection and other) biases in research
- Research on ESG in fixed income is still very limited – most focused on credit risk
- Still little analysis of ESG factors + market risks, inflation, liquidity and other risks/ opportunities
- Further academic (non-industry) research with robust methodology advised
**1st Major Trend**

ESG is increasingly incorporated into mainstream investment

**Organizational Embedding**

ESG factors are considered by all analysts – not just separate ESG teams

**Catching Up**

Fixed income is catching up fast with equity

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BLACKROCK®

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PGGM

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Corporate bonds

Multi-laterals

Sovereign bonds

Other/real assets
INVESTOR INTERVIEWS

2nd Major Trend

ESG + impact investing is starting to merge

→ Millennials & Global Development Agenda (including SDGs) are driving factors
A range of approaches exist and are evolving.

There is no prescribed sequencing. ESG approaches are aligned with investment objectives.

**How is ESG implemented by fixed income investors?**

- **ESG ‘Passive’** (via index)
- **ESG ‘Active’** (mandate with specialist manager)
- **ESG ‘Holistic’** (in-house integration across asset classes)

**Labeled Bonds**
Implementation tools/approaches – all can be taken as ‘package’ or overlaid with investor’s own ‘philosophy’
INVESTOR INTERVIEWS

Outstanding challenges
Despite evidence and willingness, implementation challenges remain

No accepted definitions of ESG (particularly S)

Data

Lack of investment instruments
How can the World Bank Group work with GPIF to mainstream ESG into fixed income portfolios?

NEXT STEPS

Data & Analysis

Frameworks

Product Development
Research Findings: Incorporating ESG Factors into Fixed Income Investments

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Building Sustainable Capital Markets
What is the World Bank?

- International Bank for Reconstruction & Development (IBRD)
- World’s largest source of development finance for past 70 years
- Aaa/AAA issuer
- Owned by 189 member countries
- Two goals: end extreme poverty and boost shared prosperity
- Activities aligned with the Sustainable Development Goals
Some history...

1944: Post-World War II reconstruction in Europe.

1940s-50s: Loans to France and Europe. Later loans helped built Japan’s bullet trains.

1960s: Shifting poverty alleviation.

Today: health, education, sanitation, infrastructure and environment and more.

US$180 billion in loans outstanding in 80 countries.

Our focus is on helping member countries find sustainable solutions to pressing challenges like climate change, gender equality, jobs, public-private partnerships, and fragility, conflict and violence.
## The World Bank Group

<table>
<thead>
<tr>
<th>IBRD</th>
<th>IDA</th>
<th>IFC</th>
<th>MIGA</th>
<th>ICSID</th>
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<tr>
<td>International Bank for Reconstruction and Development</td>
<td>International Development Association</td>
<td>International Finance Corporation</td>
<td>Multilateral Investment Guarantee Agency</td>
<td>International Centre for the Settlement of Investment Disputes</td>
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IBRD, IDA and IFC are all three rated AAA/Aaa. They share the same overall development goals, but are legally separate entities. Each has its own risk profile and capital structure. **The World Bank Treasury is the treasury for IBRD and IDA.**
Bonds for Sustainable Development
Funding Volumes

Annual Funding Volumes
Fiscal years 1995-2019, US$ billions

World Bank fiscal years begin on July 1st and end on June 30th

*Projected
World Bank Debt Products

Global Bonds

US$5 billion 3-yr Bond / July 2018

Distribution by Investor Type

- Central Banks/Official Institutions: 54%
- Banks/Bank Treasuries/Corporates: 24%
- Asset Managers/Insurance/Pension Funds: 22%

Distribution by Geography

- Asia: 29%
- Europe: 29%
- U.S.: 25%
- Americas: 13%
- Middle East & Africa: 4%
Why Investors Buy World Bank Bonds

**TRACK RECORD**
- Issuing debt since 1947
- Triple-A since 1959

**SAFETY**
- Strong balance sheet
- Prudent financial policies

**DEVELOPMENT IMPACT**
- $16.4B paid in capital
- $700 B in lending
Bonds for Sustainable Development

World Bank Project Cycle

Projects are designed to:

- Address priorities identified in the Country Diagnostic
- Contribute to the World Bank goals (end extreme poverty and boost shared prosperity)
- Ensure social, environmental and governance (ESG) aspects are covered
- Achieve expected outcomes
IBRD Invests for Impact Globally

**JAMAICA**
Improving Urban Infrastructure & Services
- >50,000 people will have improved solid waste management services
- >10,000 people have electricity
- 1,200 families with water pipe access
- 4,500 provided with jobs training

**IBRD Financing:** $42 million

**PANAMA**
Connecting rural mothers and children with quality health services
- 200,000 people have access to mobile health units
- Babies <1 year of age with complete vaccination records
- More births attended by skilled personnel

**IBRD Financing:** $40 million

**BRAZIL**
Improving water quality and environmental sustainability
- Integrated environmental licensing and water rights management systems
- 20% efficiency improvements in water use

**IBRD Financing:** $70.28 million

**GABON**
Boosting Women’s Employment
- 12,750 women are expected to benefit from new jobs and skills by the project’s end in 2019

**IBRD Financing:** $18 million

**ARMENIA**
Improving Education Readiness and Quality
- 2400 preschool enrollees
- 120 community based preschools
- 107 high schools with improved education resources

**IBRD Financing:** $15 million

**CHINA**
Reducing greenhouse gas emissions in farming communities
- CO2eq. emissions reduced by 800,000-1,000,000 tons/year
- 400,000-500,000 rural households get cleaner biogas-based cooking and heating systems

**IBRD Financing:** $120 million

**Bonds for Sustainable Development**
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Building Sustainable Capital Markets
World Bank Paving the Way in Sustainable Investing & Financial Innovation

- **First Green Bond**
- **Cool Bond**: Performance linked to Certified Emission Reductions (CERs) of two projects (Daiwa/Uridashi)
- **Nikko’s World Bank Green Fund** launched
- **World Bank issues ECO3+ Bonds** (Netherlands, ABN)
- **Index Linked Notes** raise awareness for climate in the US (Wells Fargo)
- **First vaccine bonds (IFFIm)**
- **First SRI Sukuk**
- **First SRI-themed bonds for European retail** (La Banque Postale)

**2005**
- IBRD develops Sustainable Development Bond Program

**2007**
- Pandemic Emergency Financing Facility
- Pandemic Insurance Program launched
- Sustainable Development Bond for Women’s & Girls’ Empowerment

**2011**
- First Cat Bond insuring 16 Caribbean countries against earthquakes & hurricanes
- CER monetization for UN Adaptation Fund
- Launch of Morningstar Emerging Markets Infrastructure Index
- Global Concessional Finance Facility a low-cost financing mechanism for refugee host countries
- Sustainable Morningstar Emerging Markets Infrastructure Index

**2015**
- Green Bonds reach USD 10B
- Launch of Solactive UBS Development Bank Bond Index
- Sustainable Development Bond for SDGs 3, 5, 12, & 13
- Sustainable Development Bond for Health & Nutrition
- SRI/ESG Emerging Market Currency Program (Borsa Italiana)

**2017**
- Green Growth Bonds Index-linked Notes (Asia, Europe, US; BNP Paribas)
- Sustainable Development Bond for SDGs 3, 5, 12, & 13
- Sustainable Development Bond for Health & Nutrition

**2018**
- Sustainable Development Bond for Women’s & Girls’ Empowerment
- Cat Bonds insuring Pacific Alliance countries against earthquakes
- First vaccine bonds (IFFIm)
- Sustainable Development Bond for SDGs 3, 5, 12, & 13
- SRI/ESG Emerging Market Currency Program (Borsa Italiana)

**2015**
- Bonds linked to Sustainable Development Goals
- 15-yr & 20-yr equity index-linked bonds (France, Italy)
- First Cat Bond insuring 16 Caribbean countries against earthquakes & hurricanes
- Launch of Morningstar Emerging Markets Infrastructure Index
- Global Concessional Finance Facility a low-cost financing mechanism for refugee host countries
- Sustainable Concessional Finance Facility for refugee countries

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ESG and Impact Investment for Fixed Income

Creating **frameworks and guidance** for issuers and investors to report on and understand the impact value of investment.
Promoting sustainable capital markets

Outreach

Partnerships

Impact reporting