

Global Fixed Income Sustainable Investment Practice Guidelines

BACKGROUND

This document is meant to articulate Global Fixed Income (GFI) expectations for how Environmental, Social and Governance (ESG) factors are incorporated into investment processes.

A. Global Fixed Income ESG Beliefs:

GFI, as an asset class, serves to be a diversifier to CalPERS equity risk and to be a reliable source of income. Consistent with CalPERS investment beliefs, GFI invests for the long-term. GFI staff seek to identify exposures where we have a strong belief we will be rewarded for the risk taken. GFI believes that attention to ESG factors is important in the assessment and management of risk relative to return.

GFI takes an all-inclusive view of risk and considers a range of risks that are continually evolving and that go beyond ESG's application to a sole industry or company. As examples, GFI takes an active role engaging in regulatory and industry dialogue on many different reform efforts, (including rating agency reform, the Dodd Frank Act, Libor benchmarks, mortgage fraud, Corporate Bond market tender process, and discussions with the U.S. Treasury Department on reviving the Private Label Security mortgage market), that broadly affect CalPERS and the integrity of financial markets. Our Portfolio Managers have met with congressmen and regulators and written white papers and comment letters, independently and with industry groups, on these matters. (See Appendix I for GFI 2014 ESG related initiatives and actions).

ESG FACTORS

At the portfolio level, our approach to investing seeks to identify ESG risks that are material. An ESG risk is material within the context of a portfolio strategy if it impacts a portfolio's risk and return. The GFI index has 63% of its exposure in US Government and US Government Sponsored Entities. As such, our US Government Portfolio Managers continually monitor regulation and policy emanating from Washington. At the Sovereign and Corporate level, our fundamental credit analysis process focuses on identifying those risks, as expressed in quantitative or qualitative factors, from an economic, financial, and operational perspective.

In many industries, material ESG risk factors can easily be overlooked, if analysis is solely focused on financial factors. Thus, CalPERS Credit Analysts evaluate how corporate management teams address ESG related risks along with other risks in their quarterly and annual SEC filed financial statements, offering documents related to new securities issued, and other investor materials. We use the management team's transparency in reporting and their responsiveness to material ESG factors as a means to assess a company's risk, and include this assessment in discussion with Portfolio Managers.

GFI follows regulatory developments and a management team's responses because of the potential impact on the company's bottom line, fundamental financial profile, operating risks and industry outlook. We believe that these risks are multi-faceted and can vary across and within industries over time.

GFI currently utilizes MSCI's ESG pillars and the PRI Reporting Framework definition of Corporate-Focused ESG risks as sources for identifying potential relevant ESG risks (Appendix, Item B & C). Although, GFI recognizes there is not one single source that provides an inclusive list of ESG risks, and thus relies on GFI's analysts to identify industry specific material ESG risks. Once material ESG risks are identified, the Portfolio Manager and Credit Analysts assess whether that risk is adequately priced into the particular securities.

INVESTMENT PRACTICES

A. Selection

1. Corporate Credit

GFI's Corporate Investment Grade portfolio is measured against the Barclays Long Liability Index. The Barclays Long Liability Index, by virtue of being dollar denominated and investment grade, is dominated by US and European companies that are subject to robust environmental protections by regulators. Some examples of the industries where ESG factors can affect the performance and risk profile of fixed income investments include: utilities, energy, manufacturing, mining, insurance.

GFI's Corporate Investment Grade portfolio is managed according to CalPERS Statement of Investment Policy, which requires investment grade credit ratings by at least one of the major credit rating agencies. As such, companies in our portfolio are subjected to an ESG analysis of material risks by the rating agencies, in addition to the analysis conducted by CalPERS internal Credit Analyst staff. These two levels of analysis serve as an important mitigant of ESG risks. This is not to say that ESG risks are not present for investment grade companies, but when our Credit Analysts or rating agency analysts conclude that a company is investment grade, it is only after a company's management team has convinced the analytical community that ESG factors are addressed and mitigated sufficiently to remove speculative qualities from the credit profile of the bonds the company issues.

GFI is willing to accept managed risk where we are compensated for it. Our Credit Analysts are focused on the extent to which risks, including ESG factors, are satisfactorily addressed, and, to the extent they are not, whether the compensation in terms of yield and credit spreads are sufficient to compensate for the risk.

2. Sovereign Credit Analysis and Qualitative Factors

The GFI sovereign team, which invests in the debt of sovereign nations, conducts credit analysis through a process that evaluates both quantitative and qualitative factors. The quantitative factors include economic indicators to assess the country's ability to payback and service its debt. Qualitative analyses are used to assess the country's willingness—of equal importance to a country's ability—to meet creditor obligations. Willingness to repay debt is measured by a wide range of factors, including: policy continuity, governance, voice and accountability, freedom of press, labor rights, rule of law, judicial system effectiveness and efficiency, women's rights, GINI indicator, corruption indicator, ease of doing business, freedom of association, human rights, human development index, freedom of religion, etc.

GFI's sovereign credit team draws on to assess qualitative indicators found in Appendix, Item D.

In same manner as in our credit portfolios, GFI Sovereign Portfolio Managers and research staff consider the macro and relevant micro-economic factors including, but not limited to, ESG factors and their impact on a country's financial capacity to pay its debt obligations.

B. Monitoring and Management

1. Corporate Credit

As part of the ongoing surveillance of ESG risk factors, staff completes a quantitative and qualitative assessment of the Corporate Investment Grade portfolio vs the Barclays Long Liability Index on a quarterly basis using MSCI's database of ESG factor risks. This process seeks to identify those issuers in the portfolio displaying higher ESG factor risks than the industry group and which CalPERS portfolio is overweight vs the index. Once a high risk issuer is identified, the assigned industry specialist credit analyst on the team will conduct research and diligence to understand/assess the risk, identify whether it's a known or unknown risk, determine whether it's a material financial risk, assess if management is seeking to reduce or mitigate the risk and whether the market is pricing in the risk. The credit analyst reports back his finding to the portfolio management team at the regularly scheduled quarterly industry review meeting.

2. Sovereign Credit

Likewise, the Sovereign investment team regularly conducts surveillance and updates of those quantitative and qualitative factors that affect risk and pricing of for all of its investments. Their surveillance process includes assessing changes in the ESG related quantitative factors highlighted in the investment selection process.

Conclusion

GFI's primary performance objective is to exceed the returns of the Global Benchmark Index while maintaining a high level of diversification. GFI's investment process seeks to identify opportunities across bond market sectors and invest where risks are understood and manageable. Credit risk is controlled by requiring minimum credit quality and investment grade ratings for our domestic, corporate bond portfolio. By virtue of being investment grade companies in the Barclays Long Liability Index, these companies we invest in operate in developed, highly regulated economies, and therefore have some built-in responsiveness to ESG factors. The policies of GFI are consistent with the overall objective of CalPERS, accomplished through a carefully planned and executed long-term investment program. As long-term investors, GFI naturally assesses the importance of ESG factors in the context of the risk reward when making portfolio decisions.

APPENDIX

Item A - ESG Integration – Global Fixed Income Steps 2014 YTD

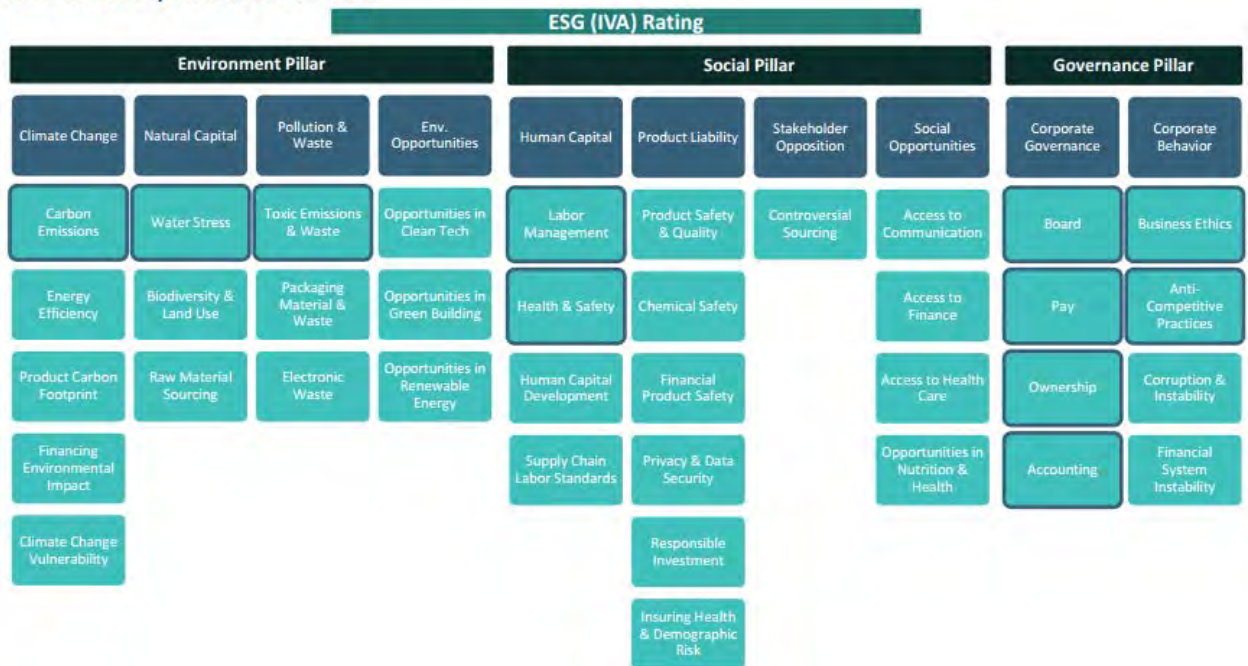
Since the 2014 kick-off for the Cross Asset Class Team on ESG, GFI staff has:

1. GFI research staff met with Sustainability Accounting Standards Board and participated in the group's effort to better prepare annual filing content that discloses how companies respond to ESG factors in their businesses. Our Analysts also regularly visit with companies in analytical calls and meetings where ESG is part of the discussion.
2. GFI collaborated with groups to improve governance procedures. GFI staff supported a letter written by the membership of the Credit Roundtable to the SEC Office of Mergers and Acquisitions who are researching new guidance on the debt tender and consent solicitation process. GFI staff also assisted in the drafting of a Credit Roundtable comment letter to the FDIC (Federal Reserve, OCC, and other federal regulators copied on the letter), surrounding the implementation of the "bail-in" framework emanating from the Dodd-Frank act. GFI staff assisted in the development of a survey of Credit Roundtable Portfolio Managers of their understanding, usage and the effectiveness of bail-in rules that was provided to the FDIC.
3. CalPERS structured securities SPM represented CalPERS at U.S. Treasury Department Roundtable on Reviving the Private Label Security mortgage market.
4. CalPERS structured securities SPM and Staff had multiple meetings with CalPERS Internal Legal and the State Attorney General's office to provide background information and trade data to assist the AG in their pursuit of judgments against JP Morgan and potentially other financial institutions as it relates to fraud and misrepresentations of mortgage security data during the financial crisis.
5. CalPERS Utility Power and Energy markets credit Analysts attended the CERA Conference – Cambridge Energy Research Associates and attended industry related conferences in order to better assess the risk of stranded assets and regulatory risks for CalPERS debt investment in Fossil Fuel companies in our portfolio.
6. Participated in various conversations with regulators to enhance governance, transparency and accountability for fixed income investors, including the head of GFI meeting with U.S. Commodity Futures Trading Commission giving input regarding benchmarks like LIBOR, and participated in hearings regarding benchmarks and derivatives.
7. Discussed ESG Integration best practices with external managers.
8. Assessed ESG analytical tools, (Bloomberg, Sustainalytics and MSCI), by GFI research staff.

9. Conducted a survey of the asset owners and asset managers of the Credit Roundtable on how their firm will comply with and their thoughts on incorporate ESG factor analysis in their credit review process.
10. Completed an analysis of the ESG risks, as defined by the MSCI, for the Investment Grade Corporate Bond portfolio vs the Barclays Long Liability Corporate Index.
11. Completed a survey of our existing external Corporate and Sovereign managers on their process to incorporate ESG risk factors into the research and investment process

Item B – MSCI ESG Research – ESG Pillars

ESG Hierarchy Effective Q1 2015



Item C - PRI Reporting Framework 2013 Main definitions, Corporate-Focused ESG Example Issues

Environmental (E)	Issues relating to the quality and functioning of the natural environment and natural systems. These include: biodiversity loss; greenhouse gas (GHG) emissions, climate change, renewable energy, energy efficiency, air, water or resource depletion or pollution; waste management; stratospheric ozone depletion; changes in land use; ocean acidification and changes to the nitrogen and phosphorus cycles.
Social (S)	Issues relating to the rights, well-being and interests of people and communities. These include: human rights, labor standards in the supply chain, child, slave and bonded labor, workplace health and safety, freedom of association and freedom of expression, human capital management and employee relations; diversity; relations with local communities, activities in conflict zones, health and access to medicine, HIV/AIDS, consumer protection; and controversial weapons.
Governance (G)	Issues relating to the governance of companies and other investee entities. In the listed equity context these include: board structure, size, diversity, skills and independence; executive pay; shareholder rights; stakeholder interaction; disclosure of information; business ethics; bribery and corruption; internal controls and risk management; and, in general, issues dealing with the relationship between a company's management, its board, its shareholders and its other stakeholders. This category may also include matters of business strategy, encompassing both the implications of business strategy for environmental and social issues, and how the strategy is to be implemented.

Item D – CalPERS Global Fixed Income Qualitative Indicators

Source	Factor
Transparency International	Corruption Perception Index
	Control of Corruption
	Open Budget Index
IMD World Competitiveness Report	Global Competitiveness Index
United Nations	Human Development Index
World Bank	GINI Coefficient
	Voice and Accountability Index
World Justice Project	Rule of Law Index
Heritage Foundation	International Property Rights Index (IPRI)
	Regulatory Efficiency
	Open Markets
Freedom House	Freedom of Press
International Labor Organization	Labor Rights
Human Rights Watch	Freedom of Association
	Women Rights
	Freedom of Religion
International Finance Corp.	Ease of Doing Business

Item E – Global Fixed Income ESG Integration Timeline

