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Sustainable finance in practice

SUSTAINABLE FINANCE

NOVA SCHOOL OF BUSINESS & ECONOMICS

ESG integration in equities investing

The Business Case For a Gender Lens

- Companies in the top-quartile for gender diversity on executive teams were 21 per cent more likely to outperform on profitability and 27 per cent more likely to have superior value creation. The highest-performing companies on both profitability and diversity had more women in line (i.e., typically revenue-generating) roles than in staff roles on their executive teams (**McKinsey**, "Delivering Through Diversity," 2018).

- For large-cap stocks (market cap greater than USD 10 billion), *the companies with women board members outperformed those without women board members by 26 per cent over the past six years*. For small-to-mid cap stocks, the basket of stocks with women on the board outperformed those without by 17 per cent over the same period (**Credit Suisse**, "Gender Diversity and Corporate Performance," 2012)

- There is a strong positive association between firms' financial performance and gender diversity in senior positions. Companies with a larger share of women in senior positions have higher return on assets. Adding one more woman in senior management or on the corporate board, while keeping the size of the board unchanged, is associated with 3–8 per cent higher return on assets (**IMF**, Christiansen, Lone, Huidan Lin, Joana Pereira, Petia Topalova, Rima Turk, and Petya Koeva. "Unlocking Female Employment Potential in Europe: Drivers and Benefits," 2016)

- A 2016 report, which included information for 21,980 publicly traded companies in ninety-one countries, found that an *increase in the share of women from zero to 30 percent was associated with a 15 percent rise in profitability* (**Peterson Institute for International Economics**. Marcus Noland, Tyler Moran, and Barbara Kotschwar, "Is Gender Diversity Profitable? Evidence from a Global Survey," 2016)

The Business Case For a Gender Lens

- *Performance of funds that are majority-owned by women has outpaced the financial industry since 2007, returning 6 per cent in 2013 compared with a loss of 1.1 per cent for the industry* (**Rothstein Kass Institute**, "Women in Alternative Investments: Building Momentum in 2013 and Beyond," 2013).

- Female executives may be more cautious than male executives in making corporate decisions. Firms run by female CEOs have lower leverage, less volatile earnings, and a higher chance of survival than otherwise similar firms run by male CEOs (Faccio, Mara, Maria-Teresa Marchica, and Roberto Mura "CEO gender, corporate risk-taking, and the efficiency of capital allocation" in **Journal of Corporate Finance**, 2016).

- Greater board diversity is associated with higher meeting attendance and better monitoring; also, female board directors are found to be more diligent monitors and to demand more audit efforts than male directors (Adams, Renee, and Daniel Ferreira, "Women in the Boardroom and Their Impact on Governance and Performance" in **Journal of Financial Economics**, 2009).

- Female directors could bring different perspectives and experiences into the boardroom, which helps improve the quality of board decisions and enhance the legitimacy of firm practices (Hillman, Amy, Christine Shropshire, and Albert Cannella, "Organizational Predictors of Women on Corporate Boards" in **The Academy of Management Journal**, 2007).

- Econometric analysis suggests that boards with higher shares of women are associated with better measures of bank stability and high profitability (looking at components such as capital-asset ratio, return on assets, and the volatility of return on assets) (**IMF**, "Women in Finance: A Case for Closing Gaps," 2018).

Integrating Gender in Stock Picking (ESG Integration)

Why?

Trillium integrated diversity, including gender and race at the company and board level into its investment research process as it **saw it as an essential component of sound corporate governance and critical to a well-functioning organization**: **companies with strong gender and ethnic diversity outperform peers** when measured by return on equity and other traditional financial metrics. Diversity also helps to reduce company-specific risk in the long term, leading to a lower cost of capital.

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ebay

Source: PRI, A Practical Guide to ESG Integration for Equity Investing, 2016

Integrating Gender in Stock Picking

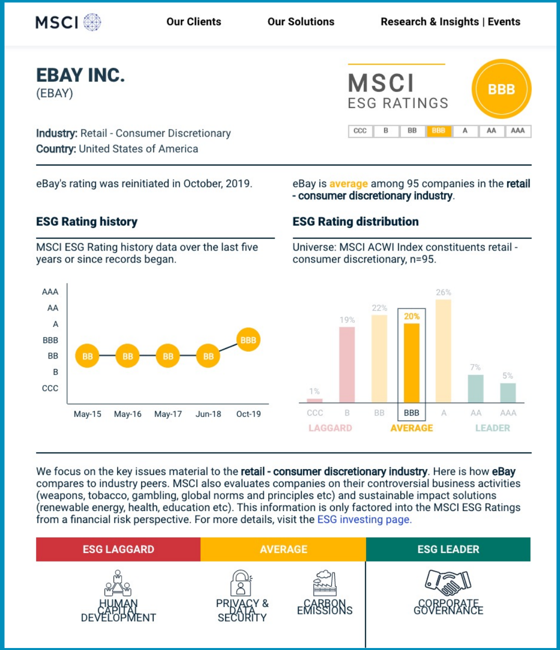
Data and Materiality

At eBay Trillium saw potential change in corporate governance related to the expected improvement in the board's gender diversity.

Trillium ESG analysts assessed several data points, engaged with the company as an active shareholder, and looked at ESG rates awarded by ESG rating companies.

They then established the materiality of ESG gender data on a retail company like eBay.

As a result of this exploration, they expected eBay diversity practices to improve.



Integrating Gender in Stock Picking

ESG data integrates with financial data

- In general, **analysts adjust the discount rate when valuing companies** that have improving or deteriorating corporate governance factors that aren't believed to be priced in by the market.
- At eBay, **they adjusted the discount rate used in the firm valuation analysis by 25bps, based on eBay's improved gender governance**. This resulted in incremental percentage **change in equity value and** an adjustment in **expected incremental portfolio alpha.**

	Base case valuation	**Adjusted valuation (ESG gender data)**
Weighted Average Cost of Capital (WACC)	8.30%	8.05%
Intrinsic value estimate	$32.00	$33.40
Current stock price	$28.50	
1-year expected stock return	12.30%	17.20%

Source: PRI, A Practical Guide to ESG Integration for Equity Investing, 2016

ESG Integration in sovereign debt

PIMCO Sovereign Debt Strategy

- U.S.-based **PIMCO** is one of the largest investment managers, actively managing more than $1.74 trillion in assets for central banks, sovereign wealth funds, pension funds, foundations and endowments, and individual investors around the world.

- **PIMCO's traditional sovereign credit analysis focused on financial and macroeconomic variables** that materially impact a country's probability of default and the expected loss if a default does occur.

- **In 2011, they realized that a government's ability and willingness to meet its financial obligations are also influenced by politics, governance, social considerations, natural disasters, and the longer-term impact of environmental factors.**

Source: CFA Institute and PRI, "Guidance and Case Studies for ESG Integration: Equities and Fixed Income", 2018

PIMCO Sovereign Debt Strategy

- PIMCO's proprietary sovereign ratings model starts with an in-depth, bottom-up country analysis. **This analysis is based on five-year macroeconomic forecasts and specific quantitative ESG indicators,** and considers both near- and long-term drivers of credit risk. **ESG variables have a combined weight of approximately 25% in the model.** Within ESG, governance ("G") variables dominate, given that they are a leading indicator of sovereign risk. Social ("S") factors, such as health and education, are less directly significant but tend to be highly correlated with initial conditions such as gross domestic product (GDP) per capita, which, in turn, is highly correlated with sovereign risk. Finally, PIMCO has found that environmental ("E") variables on average are the least correlated with three- to five year sovereign risk, with the exception of specific incidents (e.g., hurricanes, earthquakes, floods, nuclear fallouts).

FIGURE 1: VARIABLES INCLUDED IN PIMCO'S ESG SOVEREIGN SCORE

E (ENVIRONMENTAL)
- Greenhouse gas emissions per capita
- The Yale Environmental Performance Index
- Fossil fuel usage
- Renewable energy
- GDP per unit of energy

S (SOCIAL)
- Life expectancy
- Mortality rate
- Gender equality
- Gini coefficient (indicates wealth distribution)
- Health score
- Av years of education
- Av years of higher education and training
- Labor market indicators
- Corruption indicators

G (GOVERNANCE)
- Political stability
- Voice and accountability
- Rule of law
- Control of corruption
- Government effectiveness
- Regulatory quality

Source: PIMCO.

Source: CFA Institute and PRI, "Guidance and Case Studies for ESG Integration: Equities and Fixed Income", 2018

PIMCO Sovereign Debt Strategy

- **PIMCO also assesses long-term trends and tail risks*.** They analyze long-term debt sustainability, resource depletion scenarios, natural disaster scenarios, political regime change, and contingency risks, incorporating both macroeconomic and ESG factors.

- **In-country engagement is a critical component of its sovereign credit analysis and for assessing a government's track record on ESG objectives.** During their visits, PIMCO generally meets with senior government officials and politicians, focusing on the details of its credit assessment, which range from the composition of the budget and the management of foreign exchange reserves and monetary policy to progress on key development and environmental goals.

- **PIMCO also generally meets with local business people, banks, consultants, trade unions, journalists, nongovernmental organizations, and members of civil society to get a broad, holistic sense of developments in the country.**

* Tail risk is the chance of a loss occurring due to a rare event, as predicted by a probability distribution.

Source: CFA Institute and PRI, "Guidance and Case Studies for ESG Integration: Equities and Fixed Income", 2018

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PIMCO in South Africa

- **In July 2015, allegations of corruption emerged with regard to former South African President Jacob Zuma.** Criticism focused on a nuclear energy agreement between South Africa and Russia, which was believed to be engineered for President Zuma's personal gain. President Zuma was also accused of having a corrupt relationship with the Guptas, a prominent South African business family. A power struggle within the African National Congress (ANC) followed, **resulting in a weakening of South Africa's institutional framework, with frequent changes of finance ministers, fiscal slippage, and political turbulence.**

- When the allegations first surfaced, **PIMCO initiated a reassessment of South Africa's political and governance risks, and a senior PIMCO team made a due-diligence trip to the country.** The objective was to understand the economic and institutional impact as well as the social consequences of the graft (e.g., the diversion of fiscal resources away from health and education). **Following in-depth discussions with the government and a detailed analysis, PIMCO downgraded its internal credit rating for South Africa, several quarters before the major rating agencies did (see Figure 2).**

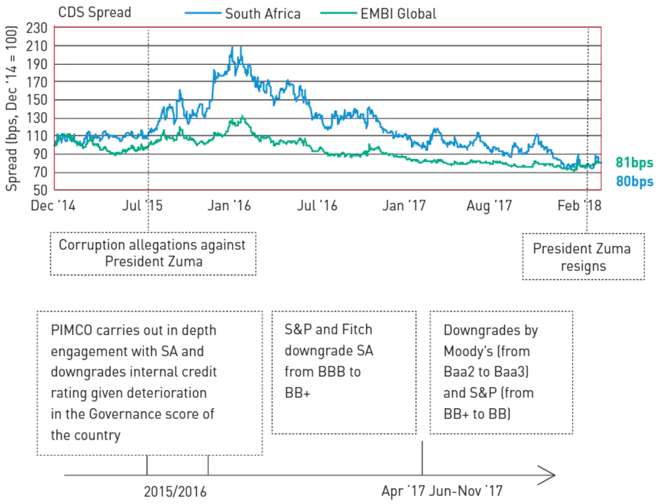
Jacob Zuma

Source: CFA Institute and PRI, "Guidance and Case Studies for ESG Integration: Equities and Fixed Income", 2018

PIMCO in South Africa

- PIMCO's downgrade led it to reevaluate its portfolio exposure to South African sovereign and quasi-sovereign risk, and led it to make a call to reduce exposure across PIMCO accounts. **Due to the integration of ESG factors in its standard sovereign risk framework, PIMCO was able to identify problems early and reduce exposure when the markets were still pricing in a favorable scenario for South Africa.** Over time, as the extent of the corruption became known, the markets and the rating agencies caught up with PIMCO's assessment.

FIGURE 2: TIMELINE OF SOUTH AFRICA'S SPREADS AND PIMCO'S SOVEREIGN CREDIT ASSESSMENT



Source: PIMCO.

Note: The sample is for illustrative purposes only. Past performance is not a guarantee or a reliable indicator of future results.

Abbreviations: bps, basis points; CDS, credit default swap; EMBI Global, Emerging Markets Bond Index Global; SA, South Africa.

Source: CFA Institute and PRI, "Guidance and Case Studies for ESG Integration: Equities and Fixed Income", 2018

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