



# DIVERSITY, EQUITY, & INCLUSION IN FUNDS

ESG & SUSTAINABILITY FUNDS IN UNITED STATES

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# Denominator

# Foreword

## Anders Rodenberg, CEO of Denominator

In recent years, the concept of sustainability has rightfully earned its place in corporate strategy and in the investment world, yet a crucial pillar has historically often been overlooked: People or Diversity, Equity, & Inclusion (DEI).

Investors scrutinize the credit exposures of funds, their carbon footprint, water usage, and biodiversity impact, yet many still struggle to understand the DEI exposure. Despite **PRI** making DEI an explicit factor to consider last year (2022) by saying "Our position is that investors across all major asset classes **can, and should, integrate DEI considerations into investment and ownership decisions**. This position is anchored in the UN Guiding Principles on Business and Human Rights", many investors are not able to do so or stop at gender in boards.

Denominator recognizes that sustainability is a sum of its parts, i.e., the Planet and the People. While the Planet aspect has been extensively analyzed, often due to more readily available data, we now have the tools and the data to understand the people aspect of sustainability. Therefore, we believe it is time for People to become a central part of any ESG discussion.

The increased skepticism against ESG investing underscores the need for clarity and transparency in all the 3 letters and not just E. Much of the skepticism has rightfully been driven by the confusion and mislabeling of funds that aggregation of the multiple factors causes.

As we move forward, regulations, such as SFDR, have started to address the challenges facing the industry, but the regulatory efforts are focusing predominantly on the environmental side of the equation. Without better inclusion of the social factors, investors will still question funds labelled sustainable or ESG. Rightfully so, is a fund for example truly sustainable if it shows large underperformance in social aspects? Perhaps it would be more accurate to label such funds as environmental until they achieve a holistic approach to sustainability.

Our commitment at **Denominator** is to bring transparency and accountability to the People aspect of investing, recognizing that a sustainable future should combine both People and Planet.

*Anders Rodenberg*

# Executive summary

This first report focusing on the Diversity, Equity, & Inclusion (DEI) performance of US funds dedicated to ESG and sustainability marks the initial stride taken by Denominator toward the launch of a comprehensive and consistent DEI benchmark product for funds (both ESG and non-ESG focused) globally.

The analysis used Denominator<sup>Global</sup>, a global DEI database covering more than 3 million companies, to assess the performance on 15 dimensions of DEI such as Gender, Race/Ethnicity, Age, Disability, etc. across hundreds of ESG/Sustainability funds in the US. The results show a relatively large variance across the funds DEI performance which concludes it does matter which fund is selected for investors who care about DEI in general or a specific dimension such as Gender, Race/Ethnicity, Disability, etc.

top  
5  
funds

The **total DEI exposure of the top 5 funds is zero or very low**, considering both average and bottom quartile thresholds (both adopted in this analysis). This means that these funds allocate their capital in companies with high DEI performance and that consistently outperform their peers.

bottom  
5  
funds

A noteworthy disparity exists between the top-ranked funds and those at the bottom of the ranking: **the bottom 5 funds have more than 60% of the capital is invested in companies with lower DEI performance and that perform below their peers.**

SDG Goal  
#5  
Gender  
Equality

UN SDG has a specific goal for Gender Equality (Goal #5), but of the hundreds of sustainability funds analyzed, only 4% (~20 billion USD) is invested in companies led by women CEOs, despite ~7% of CEOs in global indexes such as MSCI World and ACWI are women.

# Introduction

This first report focusing on the Diversity, Equity, & Inclusion (DEI) performance of US funds dedicated to ESG and sustainability marks the initial stride taken by Denominator toward the launch of a comprehensive and consistent DEI benchmark product for funds (both ESG and non-ESG focused) globally, that will be available in 2024.

There is a growing focus on DEI within investment management driven by four main factors:

1. Regulatory developments
2. Long term Alpha
3. Fiduciary responsibility
4. The biggest wealth transfer in history

## 1. Regulatory

As ESG regulations continue to mature, there is a growing emphasis on the “S” (Social) within ESG. Legislators worldwide are actively crafting diverse regulations that incorporate or place exclusive emphasis on DEI principles.

Notable examples include the Sustainable Finance Disclosure Regulation ([SFDR](#)), [Canada’s](#) initiatives regarding DEI reporting,

[Nasdaq](#) regulatory requirements, [Italy](#) Gender Reporting Law, and the efforts of the U.S. Security and Exchange Commission ([SEC](#)), among others

## 2. Long term Alpha

Increased research and reports linking DEI to various aspects of companies’ general performance.

A recent example is a research [study conducted by Moody’s](#), which uncovered a correlation between the performance of race/ethnicity factors and credit risk ratings. Moody’s has also conducted analogous [investigations into gender-related factors](#) and their impact on credit risk, yielding similar findings.

## 3. Fiduciary responsibility

Redirecting capital to reduce global Diversity, Equity, & Inclusion gaps is now widely regarded as a morally imperative action. Both consumers and pension contributors, particularly the younger demographic, are displaying a growing commitment to values-driven choices in their consumption and investment patterns. The threshold for determining what is socially acceptable versus unacceptable is on a steady rise.

#### 4. Biggest wealth transfer in history

The next generation of investors care about DEI and they are about to inherit more than USD 65 trillion by 2030. Millennials and Gen Z will soon have higher purchasing power than Boomers and the next generation are accustomed to customization and require value based options in their investment decisions. DEI is central theme for this group of investors making it critical for financial institutions to understand and incorporate DEI into their investment products such as funds

Historically, the absence of global DEI standards, tools, and precise definitions have limited investment firms to fully incorporate DEI into all their investment procedures and products as they have already done with other areas such carbon or biodiversity. For instance, Blackrock, T Rowe Price, and Nuveen have different criteria and benchmarks for board composition and gender diversity, as observed in expert interviews conducted by Denominator.

As a seasoned expert with 25 years in the financial sector, including a decade in ESG and 50 billion USD in ESG and impact investments, aptly states: “We require a global standard for DEI to offer robust products and meet the increasing demands from asset managers.”

With its global database covering more than 3 million public and private companies across 195+ countries and 85+ industries on 650+ DEI data variables, Denominator has already emerged as the global standard for DEI data and ratings as an answer to the market demand. With the launch of its product dedicated to funds DEI exposure, its data will however become even more accessible for everyone within investment management.

This report and its scope target a peculiar section of the funds market: ESG & Sustainability funds and their DEI performance. This choice was taken to align with COP28 and some of the current sustainable investment challenges.

The primary objective of this report is therefore to delve into the DEI performance of ESG and sustainability funds in US, and thereby showcase one of the use cases for Denominator’s new fund DEI exposure product.

“We require a **global standard** for DEI to offer robust products and meet the increasing demands from asset managers,,

- Expert with 25 years in financial sector

# Approach

## Quick overview

Denominator compiled data on hundreds of ESG & Sustainability funds in US and included the majority of the largest funds based on their most recent SEC filings. This analysis focuses on equity funds exclusively dedicated to ESG and sustainability (see methodology section for more details on data collection).

The main variable used in this report is DEI exposure to bottom quartile and/or average. Exposure is the % of investments in companies with a DEI performance lower than the given threshold relative to their country peers. This method of analyzing exposure to the bottom quartile (or average) at country level serves to account for historical and cultural differences in countries.

As an illustrative example, Japan, when contrasted with Sweden, demonstrates a general lower degree of gender representation in boards and executive teams. A company in Japan would only be classified as bottom quartile performer relative to other companies in Japan, and not relative to gender representation of companies in Sweden.

This relative rather than absolute comparison provides a way of analyzing funds DEI performance, without a bias toward funds only investing in countries with highest DEI performance the most investments in countries (see methodology section for more details on DEI scores and approach used in this analysis).

### Disclaimers on the analysis

The analysis is focused on **equity**, **ESG**, and **Sustainability mutual funds** and **ETFs** in the **United States** and **regulated by SEC**.

Denominator performed **the analysis of the investments** managed by the funds and not of the funds themselves. Therefore, the results are a weighted average (based on capital allocation and relative to AUM) for each fund: the fund exposure is the sum of the exposure of the stocks times the percentage of the value allocated to the stock.

Denominator is aware that the mix of investment of a fund might vary quite significantly over time, thus this analysis is a snapshot of the fund DEI profile for the given point in time – data on the date of filings are available upon requests

# Findings

## Aggregated analysis

On an aggregated level the ESG and sustainability funds exhibit limited bottom quartile exposure of 7% to Total DEI, which is the aggregated DEI score measuring DEI across 15 dimensions on Executive, Board and Company level.

This can be viewed as in a positive or negative light, depending on the reader. On one hand, this means that approximately 93% of the funds are allocated to equities that outperform the lowest-performing 25% of companies within the same country. On the other hand, there is still exposure to bottom quartile. As an example, would it be acceptable to have 7% of “E”-focused & sustainable funds invested in the worst carbon emitting companies?

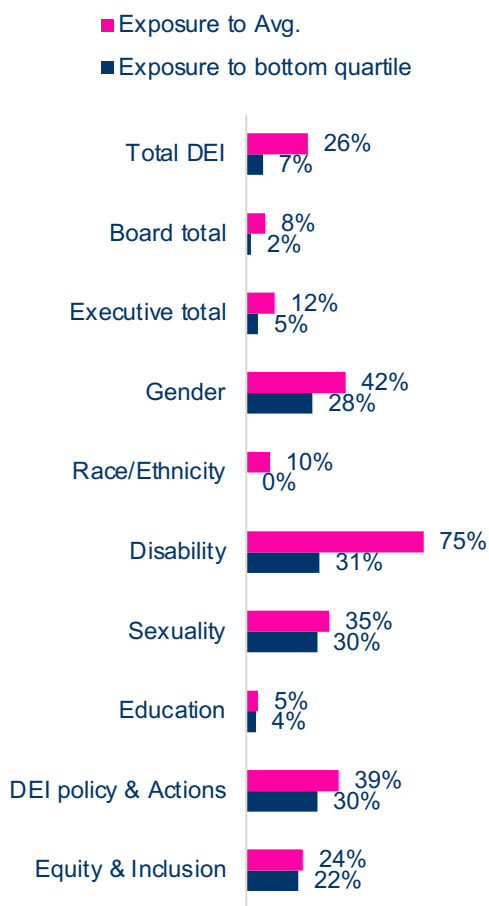
If the threshold is changed to below average, the exposure to Total DEI increases to ~26%. This means that 26% of investments in ESG & Sustainable funds in US have been made in companies performing below their country peers on DEI.

Looking across individual DEI dimensions, some has exposure lower bottom quartile, while it is ~0% for race/ethnicity performance. There is however ~28% exposure to worst performing companies on Gender and even more exposure to areas such as

Disability, Sexuality, and DEI policies & actions.

Considering the average threshold, exposure increases, as could be expected. However, for some DEI dimension the effect is significantly larger than others.

### EXPOSURE\* OF FUNDS PER DEI DIMENSION, % OF INVESTMENTS



\*) Average exposure to bottom quartile and average per DEI dimension across all funds

The main focus of this analysis is Total aggregated DEI performance, but due to the central role of the UN's Sustainable Development Goals, the analysis was extended to also investigate specifically the Gender Dimension of DEI.

UN SDG Goal #5 is Gender Equality, but of the hundreds of ESG & sustainability funds analyzed, only ~4% (equivalent to approximately 20 billion USD) **is invested in companies led by women CEOs**, despite ~7% of CEOs in global indexes, such as MSCI World and ACWI, are women. This essentially means that investing in traditional indexes would direct more capital towards women lead businesses than investing in ESG & sustainability funds in US.

Similar to the findings for Total DEI, there is large variance of Gender exposure among funds. Some shows little exposure, while some others have significant bottom quartile gender exposure.

**Approximately**  
**20 billion USD**  
(~4% of total capital)  
are invested by ESG & Sustainability funds in US  
in companies led by  
**women CEOs**





# Findings

## Top & Bottom funds for DEI performance

Looking at the individual fund level instead of aggregated across all the hundreds of ESG & sustainability funds, it becomes clear that some funds perform very well, while others shows high exposure. Sustainability is about People and Planet, therefore if an investor believes in the People side, these results show that it does matter which fund is chosen to make an investment.

The top 5 funds that exhibit the lowest level of DEI exposure are:

1. **Frontier funds** | Frontier MFG Global Sustainable Fund: This fund demonstrates no DEI exposure to either the lower quartile or the country's average. This fund has been selected as #1 due to the lower gender exposure.
2. **Emerge ETF Trust** | Emerge EMPWR Sustainable Dividend Equity ETF: Sharing the top position according to total DEI exposure, although with more gender exposure than #1, this fund also exhibits no DEI exposure to the lower quartile or the country's average.
3. **NuShares ETF Trust** | Nuveen Winslow Large-Cap Growth ESG ETF: This fund has only approximately 1.2% of its funds invested below the country's average.

4. **DBX ETF Trust** | Xtrackers S&P 500 Growth ESG ETF: With just around 1.7% of its funds allocated below the country's average, this fund secures a top position.
5. **Global X Funds** | Global X Conscious Companies ETF: This fund demonstrates only about 2.2% of its funds below the country's average.

### 1 Fronter MFG Global Sustainable Fund

- **Ranks #1** across ESG & Sustainability funds in US
- **0% total DEI exposure** to bottom quartile and average
- **0% gender exposure** to bottom quartile

It is worth noting that all the top five funds in this ranking display no total DEI exposure to the bottom quartile. This indicates that the entirety of their investments is directed towards companies that outperform at least 25% of the companies in the same country.

# DEI exposure of top 5 funds

TOP 5 FUNDS	1-3-5 YEAR FINANCIAL PERF.	TOTAL DEI Ranking variable	EXECUTIVE Single level		GENDER Single dimension						
			EXP. TO LOWER QUART.	EXP. TO AVG.	EXP. TO LOWER QUART.	EXP. TO AVG.					
<b>Frontier Funds  </b> Frontier MFG Global Sustainable Fund	18.26%	0.0%	0.0%	4.7%	0.0%	10.9%					
	3.45%										
	-										
<b>Emerge ETF Trust  </b> Emerge EMPWR Sustainable Dividend Equity ETF	-						0.0%	0.0%	3.4%	1.9%	28.4%
	-										
	-										
<b>NuShare ETF Trust  </b> Nuveen Winslow Large- Cap Growth ESG ETF	21.11%	1.2%	1.2%	6.0%	4.6%	34.6%					
	6.10%										
	12.76%										
<b>DBX ETF Trust  </b> Xtrackers S&P 500 Growth ESG ETF	-						1.7%	0.2%	0.9%	7.4%	52.0%
	-										
	-										
<b>Global X Funds  </b> Global X Conscious Companies ETF	5.62%	2.2%	0.0%	1.5%	3.9%	22.3%					
	8.06%										
	9.51%										

The low total DEI exposure of the top 5 funds corresponds to low exposure across most DEI dimensions. However, it is important to recognize that this does not mean that all funds show equal exposure across every DEI dimension. Some funds have more exposure in specific DEI dimensions, while still maintaining an overall low total DEI exposure. This occurs because total DEI considers all DEI dimensions in a comprehensive manner, allowing for fluctuations in performance. See below a high-level overview of Frontier Funds ranked #1.

**FRONTIER FUNDS | FRONTIER MFG GLOBAL SUSTAINABLE FUND**

**GENERAL**

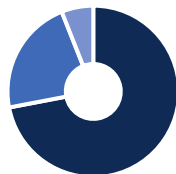
**Total AUM:** ~28 mil. USD

**# of stocks:** 30

**Index:** MSCI ACWI NR USD

**Focus:** 80% ESG investments

**Funds allocation, asset type**



- US stocks
- non-US stocks
- non-stock

**SELECTED STOCKS**

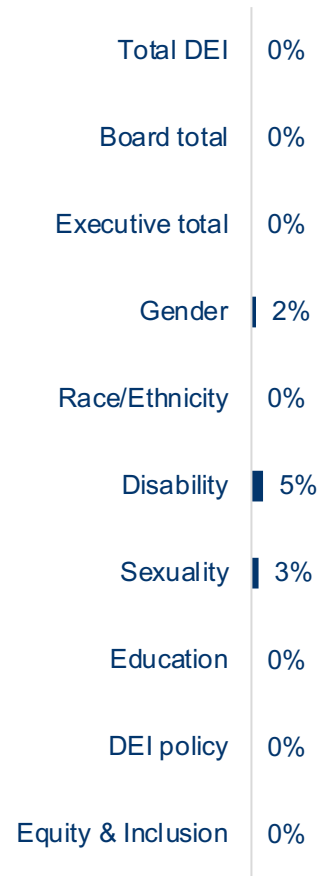
**Top 3 stocks DEI performance**

Issuer	Value, kUSD	Delta**, %
Reckitt	1,068	+155%
Unilever	1,206	+139%
SAP	1,763	+81%

**Bottom 3 stocks DEI performance**

Issuer	Value, mUSD	Delta**, %
Booking	838	+52%
Novartis	1,226	+51%
Nestle	1,086	+46%

**BOTTOM QUARTILE DEI EXPOSURE, % OF EQUITY\***



On one end of the funds DEI performance spectrum, the top five funds exhibit low total DEI exposure. In contrast, the bottom five funds allocate over 60% of their investments to stocks that underperform the country’s average total DEI score. See next page for anonymized overview of bottom 5 DEI exposure levels.

\*) Each percentage represents exposure to bottom quartile to different DEI dimensions and level: total DEI – most comprehensive, total board/executive – at this level of the company, or selected DEI dimensions

\*\*) Performance compared to total DEI country bottom quartile

# DEI exposure of bottom 5 funds

BOTTOM 5 FUNDS 1-3-5 YEAR FINANCIAL PERF.		TOTAL DEI Ranking variable	EXECUTIVE Single level		GENDER Single dimension	
		EXPOSURE TO AVG. (EXP. TO LOWER QUART.)	EXP. TO LOWER QUART.	EXP. TO AVG.	EXP. TO LOWER QUART.	EXP. TO AVG.
1	0.07%	69.5% (42.1%)	18.2%	51.6%	87.7%	91.9%
Anonymized	12.22%					
	9.32%					
2	14.76%	66.1% (35.0%)	14.3%	31.3%	75.2%	80.0%
Anonymized	1.25%					
	3.26%					
3	14.54%	67.2% (34.9%)	13.2%	29.2%	76.2%	81.3%
Anonymized	-0.45%					
	2.83%					
4	-	66.0% (34.9%)	12.9%	28.7%	74.8%	80.1%
Anonymized	-					
	-					
5	15.45%	63.1% (34.1%)	24.1%	38.0%	78.2%	84.2%
Anonymized	-3.07%					
	1.85%					

# Methodology

## Scope of the analysis & data collection

The primary scope of this analysis and the related insights pertains to ESG and sustainability funds in the United States. Denominator conducted an extensive search, identifying thousands of funds and their corresponding investments and fund allocations based on the latest SEC filings. Consequently, the analysis presented here is reflective of a specific point in time, coinciding with the most recent SEC filing of each respective fund.

To compile the final dataset and identify the ESG and sustainability focused funds investigated in this report, Denominator used different approaches: using keyword search in fund names, desktop research of established ESG lists (e.g., Morningstar resources), and conducting interviews with subject matter experts. The resulting dataset was validated and ensured to encompass most of the ESG and sustainability funds in the US, including the largest ones.

Denominator has also decided to focus solely on equity funds, to ensure the highest coverage and more detailed data:

Denominator mainly collects data on public and private corporations, therefore there is a one-to-one match with stocks in equity funds. Therefore, stocks for each fund have been linked to a Denominator database entry, ensuring access to detailed DEI data and scoring for that specific company. The match rate achieved exceeds 90% across all the funds in the analysis. As a result, the outcomes of the analysis stand as robust and reliable insights – for the given point in time as the SEC filing.



# Methodology

## Detailed analysis approach

For each stock within every fund portfolio, Denominator conducted a matching process with its extensive database to access a wide array of DEI data.

Denominator's scores go from 0-100 with 0 being the lowest and 100 being the highest. DEI is not like financial risk where models have probability of default data available to calibrate against. Scores are therefore calibrated to macro-level data.

Examples:

- **Race/Ethnicity score** is calibrated to Race/Ethnicity numbers for the company's country or regions of operation. This means a company with 100% Caucasian leadership that only operates in the USA would get lower score than a company with 100% Caucasian leadership only operating in Denmark because the race/ethnicity compositions of the two populations are different (more Caucasian population in Denmark)
- **Women vs. Men distribution** is around 50/50 across the globe. The gender model is calibrated to provide a score of 100 for equilibrium around 50/50, and a score of 0 for 0/100 or 100/0 gender distribution. Scores in between are distributed based on the distance from equilibrium.

**Scores:** 0-100 values calculated weighted different factors relative to the specific DEI dimension.

Aggregated scores (i.e., Overall DEI, Executive, Board, Company) are calculated as the weighted average of their sub-scores.

Denominator scores are built from different levels (such as executive, board, and company) and DEI dimension components (such as gender, age, sexuality, etc.).

Conceptually, formulas work in the following way:

- Company Performance = Executive Level + Board Level + Company Level
- Each of these has the underlying DEI dimension:
  - *Executive level* =  $\sum_{i=1}^n w_i d_i$   
where  $w$  represents the weight assigned to a specific DEI dimension ( $d$ ) and  $d$  represents the DEI dimension for the executive level, such as gender, age, religion, education, race/ethnicity, sexuality, family, disability, job, and urban

- *Board level* =  $\sum_{i=1}^n w_i d_i$  where w represents the weight assigned to a specific DEI dimension (d) and d represents the DEI dimension for the board level, such as gender, age, religion, education, race/ethnicity, sexuality, family, disability, job, and urban
- *Company level* =  $\sum_{i=1}^n w_i d_i$  where w represents the weight assigned to a specific DEI dimension (d) and d represents the DEI dimension for the company level, such as DEI policy, gender, race/ethnicity, age, equity & inclusion, disability, health, family, job, education, and sexuality

For the exposure analysis, Denominator employed its advanced M+ proprietary model, which incorporates detailed data for each company and provides estimations when specific company data is unavailable (for a limited percent of capital). Estimations are calculating leveraging data of companies within the same industry and countries and the lower quartile is taken, to penalize the company for missing data (under the assumption that data is not publicly available). This approach ensures complete coverage of the set of companies matched to Denominator's database.

DEI exposure was quantified across all the aforementioned dimensions, and it is defined as the percentage of a fund's investment value falling below a specified threshold for a particular DEI dimension/level score. In this analysis, Denominator adopted two distinct exposure calculations:

- **Below the bottom/lower quartile** (called exposure to bottom quartile): Denominator assessed the percentage of funds invested in companies performing below the threshold score of the bottom quartile, calculated in relation to companies within the same country.
- **Below the average** (called exposure to average): Denominator determined the percentage of funds invested in companies performing below the threshold score of the country's average, considering companies within the same country.

## TOTAL DEI SCORE

A comprehensive score encompassing all company levels (*board, executive, and overall company*) and all DEI dimensions defined within Denominator's methodology

However, as a ranking variable, only the total DEI exposure to the bottom quartile and average was considered. This choice was made because total DEI encompasses all DEI dimensions and company levels and has been designed to offer the most comprehensive evaluation of a company's DEI performance. Exposure to the bottom quartile was considered the primary ranking variable, and in cases of identical exposure values, funds were ranked using their exposure to the average as the secondary ranking variable. Lastly, gender exposure to bottom quartile was used in case of a tie (utilized to determined the top fund in the set).

### LINK TO DEI DATA 1

Each stock in fund investments is associated to its DEI ratings, available in Denominator database



### DEI SCORES 2

The scores analyzed are varied:

- Total DEI, comprehensive all DEI dimensions and company level
- Board & Executive DEI score
- DEI dimension level scores

x/100

### DEI EXPOSURE 3

Exposure to any DEI dimension is calculated as percentage of funds invested in stocks performing:

- Below bottom quartile in same country
- Below average in same country



### FUND RANKING 4

The final ranking of funds is based on **total DEI** exposure, both to bottom quartile (primary variable), average (secondary variable) and gender exposure to bottom quartile (tertiary variable)





# About Denominator

Denominator is the leading data provider of DEI scores and ratings with a mission to ensure fact-based transparency to DEI across organizations, industries, and countries. With the largest DEI database in the world and its holistic approach to DEI, Denominator provides a common language for DEI, helping organizations to better understand risk and opportunities and make informed decisions.

Denominator covers more than 3 million public and private companies across 195+ countries and 85+ industries. The raw data and analytical insights drive the most comprehensive DEI rating models and indexes, creating the global standard for measuring DEI performance.

For more information, please visit [www.denominator.one](http://www.denominator.one)



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