

Fund ESG Transparency

Quarterly Report 2021
Q2 Spotlight: Mutual Funds

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Executive Summary

ESG funds are growing in number and their role as an ESG integration tool in investors' portfolios is also becoming more established. With this in mind it's important to examine the ESG characteristics of the product universe, thus enabling more-informed fund selection decisions for investors and for product issuers that may want to achieve specific ESG outcomes.

Second in our series of quarterly fund ESG transparency reports, we examined the universe of mutual funds in our coverage. These funds dominate the ESG funds universe, making up approximately 82% of ESG funds available for investment globally.

Key Takeaways:

- » The ESG mutual fund subset remains a relatively small proportion of the overall mutual funds universe, with current assets estimated to be just over USD 2 trillion, or 4.3%, of overall assets.¹ Over 50% of ESG mutual funds were equity funds, and an overwhelming majority (77%) of these funds were domiciled in Europe as of Q2 2021, highlighting Europe's robust pace of ESG adoption versus other regions.
- » Across our rated mutual fund universe, most (84%) exhibited an Average ESG rating (A, BBB, BB), across all asset classes. ESG leader (AAA- and AA- rated) funds represented 15.2% of funds globally, of which the majority (76.3%), were domiciled in Europe.
- » Funds invested more in companies that performed better on Environmental key indicators rather than Social and Governance factors; 79.4% of funds scored between 5-7 on Environmental factors, 88.5% scored between 4-6 on Social factors, and 52.8% of funds scored 3-5 on Governance factors. This reflects the general prominence of E over S and G in the ESG fund strategy landscape and may indicate that challenges exist in structuring fund products to optimize Social and Governance attributes.
- » Emerging market-focused funds on average exhibited a carbon intensity roughly three times (3.2x) that of developed market funds (463.0 tons versus 144.3 tons CO2 equivalent/USD Million Sales).
- » European funds exhibited the most effective underlying boards with the lowest average Board Flag % of 7.3% while funds with an Asian focus exhibited the highest at 28.2%.
- » Globally, most funds exhibited low female board participation. Regional disparities existed; mutual funds focusing on European exposure also averaged the highest exposure to firms with female board participation² of at least 30%. Asia-focused funds, in particular those focused on China and Japan exposure, displayed the lowest average female board participation.

1 Broadridge and MSCI ESG Research as of April 30, 2021

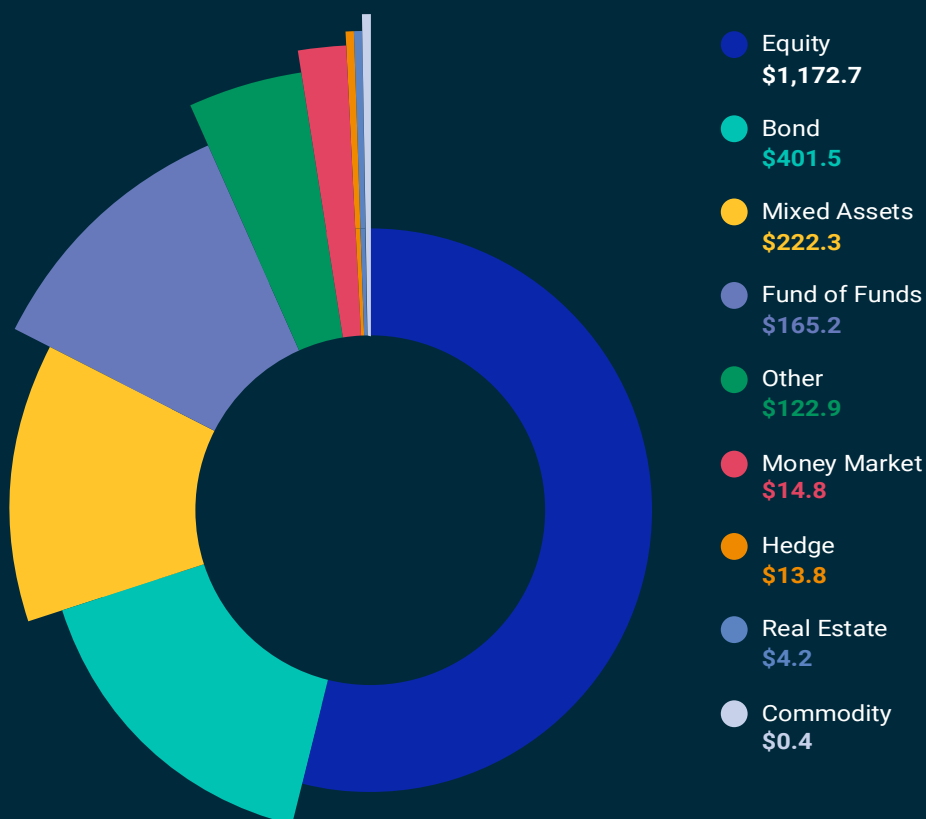
2 Underlying market value exposed to companies where women comprise at least 30% of the board of directors

Spotlight: Mutual Funds

Assets and Distributions

Mutual funds are the largest segment of the global fund universe, holding over USD 48 trillion in assets.³ The ESG subset of mutual funds, although growing rapidly as of late, still remained a relatively small proportion of the total fund universe, with current assets estimated to be just over USD 2 trillion, or 4.3% of overall mutual fund assets.⁴

Exhibit 1: ESG Mutual Funds AUM by Asset Class, USD Billion



Source: Broadridge and MSCI ESG Research as of April 30, 2021

Actively managed funds accounted for the majority of ESG mutual funds. There were over 15x more actively managed funds in our universe than index funds, and collectively these held 7x the assets of index funds. Equity accounted for over 50% of ESG mutual funds, with an overwhelming majority (77%) of these funds domiciled in Europe.

Exhibit 2: # of ESG Mutual Funds by Asset Class

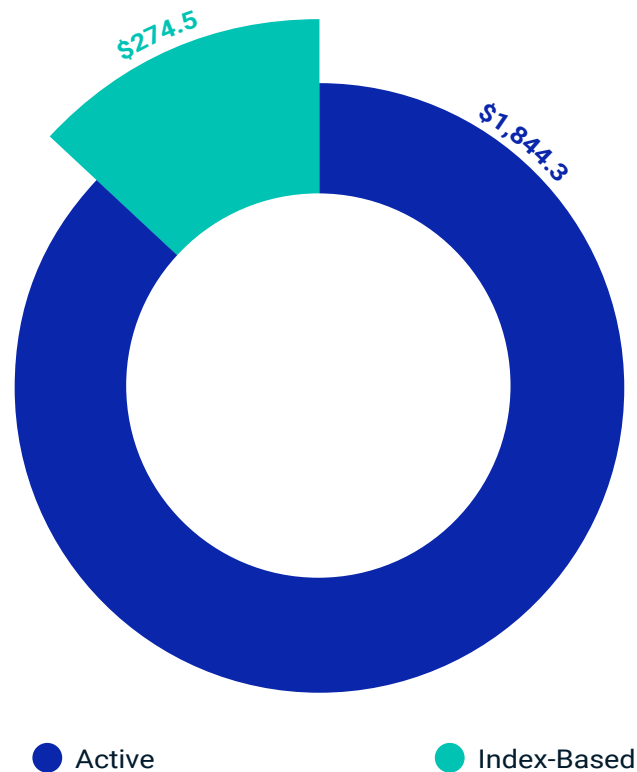
Asset Class	# Funds
Equity	3,582
Bond	1,070
Money Market	110
Mixed Assets	839
Fund of Funds	716
Hedge	18
Commodity	10
Real Estate	11
Other	280

³ Broadridge and MSCI ESG Research as of April 30, 2020

⁴ ESG funds are defined as any fund that employs any ESG considerations in its security selection process, (values and screening/ranking/exclusions/integration/optimization, etc. and their combinations). In simplest terms, it is the widest possible net under which any and all funds employing any ESG considerations in security selection are captured. All fund characterizations based on data from Broadridge and MSCI ESG Research, as of April 30, 2020.

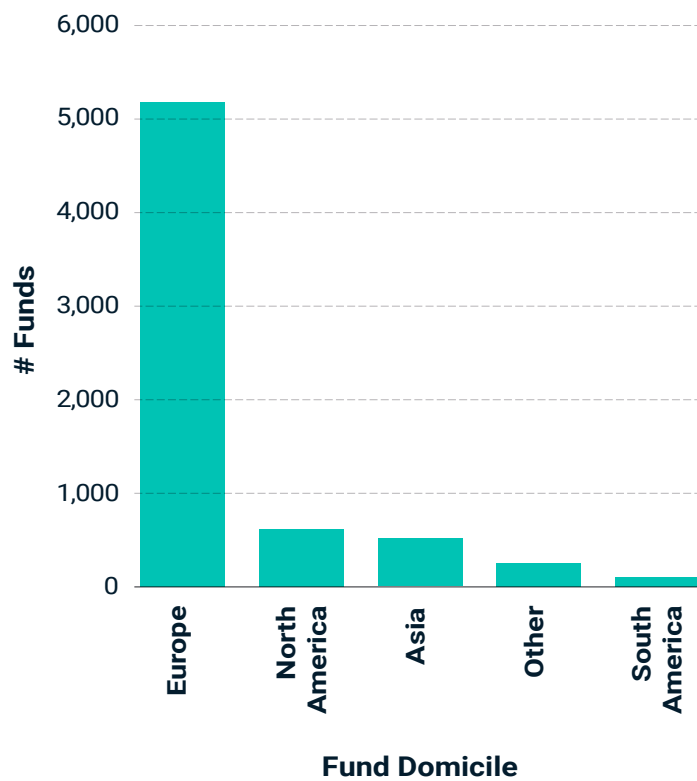


Exhibit 3: ESG Mutual Funds by Vehicle



Source: Broadridge and MSCI ESG Research as of April 30, 2021

Exhibit 4: ESG Mutual Funds by Domicile



Source: Broadridge and MSCI ESG Research as of April 30, 2021

The Largest ESG Mutual Funds

The top 20 largest ESG mutual funds held over USD 180 billion in assets as of April 30, 2021, or approximately 9% of overall ESG mutual fund assets globally.⁵ Over 77% of the invested assets were held in active funds. But the largest funds were managed in a variety of ways: active and index-based, integration, values- and screens-based, and thematic.

5 Broadridge and MSCI ESG Research as of April 30, 2020

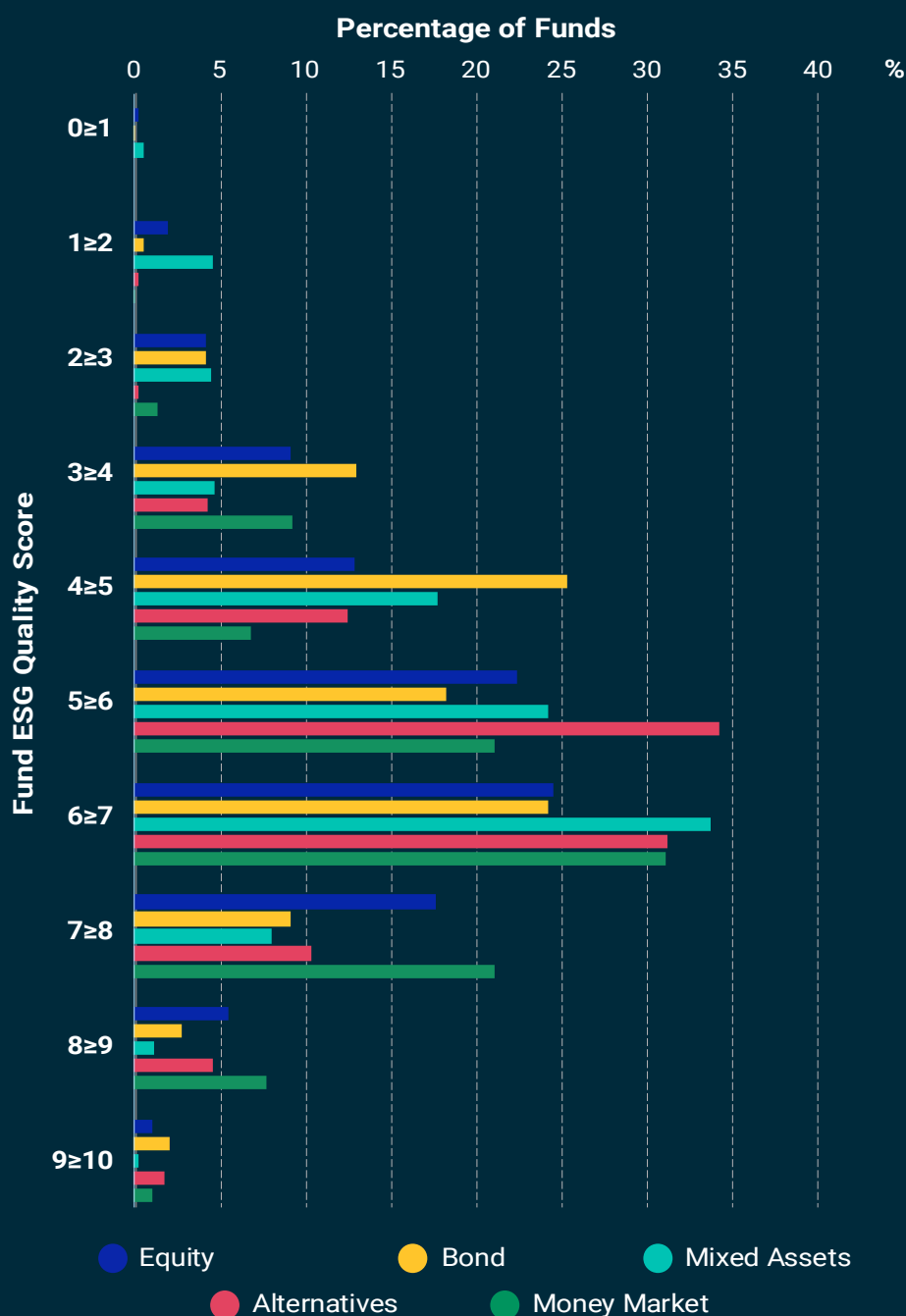
6 Percentile rank of the fund within its peer group and within the global universe of funds in MSCI's coverage.

Exhibit 5: Largest ESG Mutual Funds

#	Name	Assets USD Billion	Launch Date	Domicile	Geographic Focus	Fund Type	MSCI ESG Rating	Peer Percentile Rank ⁶
1	Parnassus Core Equity Fund	25.6	1992	U.S.	U.S.	Active Mutual	A	81st
2	Vanguard FTSE Social Index Fund	12.0	2000	U.S.	U.S.	Index Fund	BBB	46th
3	Robeco High Yield Bonds	11.9	1998	Luxembourg	Developed Markets	Mutual Fund	-	-
4	Stewart Investors Asia Pacific Leaders Sustainability Fund	9.8	2003	UK	Pacific ex Japan	Active Mutual Fund	A	65th
5	Vontobel Fund - mtX Sustainable Emerging Markets Leaders	9.7	2011	Luxembourg	Emerging Markets	Active Mutual Fund	A	76th
6	Pictet - Global Environmental Opportunities	9.5	2010	Luxembourg	Global	Active Mutual Fund	AAA	99th
7	AM-One Global ESG High-Quality Growth Equity Fund	9.3	2020	Japan	Global	Active Mutual Fund	-	-
8	Northern Trust World Custom ESG Equity Index	9.3	2013	Ireland	Global	Index Fund	A	37th
9	Robeco Global Consumer Trends	9.2	2004	Luxembourg	Global	Active Mutual Fund	BBB	8th
10	Nordea 1 - Global Climate and Environment	8.8	2008	Luxembourg	Global	Active Mutual Fund	AA	91st
11	KLP AksjeGlobal Indeks I	8.4	2004	Norway	Global	Index Fund	A	33rd
12	Pictet - Water	8.3	2000	Luxembourg	Global	Active Mutual Fund	AA	-
13	Parnassus Mid-Cap Fund	7.4	2005	U.S.	U.S.	Active Mutual Fund	A	98th
14	CS Global Digital Health Equity Fund	7.1	2017	Luxembourg	Global	Active Mutual Fund	BBB	32nd
15	TIAA-CREF Social Choice Equity Fund	6.7	1999	U.S.	U.S.	Active Mutual Fund	AA	96th
16	TIAA-CREF Core Impact Bond Fund	6.3	2012	U.S.	U.S.	Active Mutual Fund	-	-

17	Handelsbanken Global Index Criteria	6.1	2018	Sweden	Global	Index Fund	A	24th
18	Nordea 1 - Emerging Stars Equity Fund	6.1	2011	Luxembourg	Emerging Markets	Active Mutual Fund	A	86th
19	Putnam Sustainable Leaders Fund	6.1	1990	U.S.	U.S.	Active Mutual Fund	AA	97th
20	BlackRock Sustainable Energy Fund	6.0	2001	Luxembourg	Global	Active Mutual Fund	AA	92nd

Exhibit 6: Fund ESG Quality Score Distribution



ESG Attributes

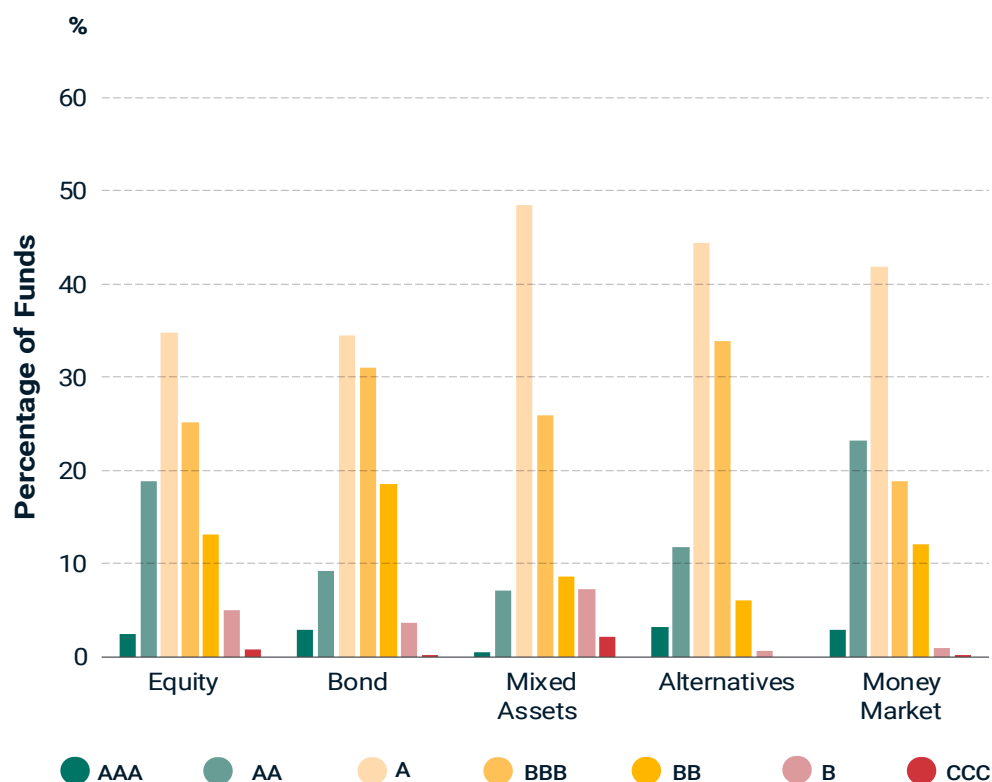
More than 40,000 mutual funds fall in our coverage. In the following sections, we explore the distribution of ESG attributes across the funds we cover, looking at the trends and their drivers. All data points analyzed are as of April 30, 2021.

MSCI ESG Quality Scores and Ratings

The MSCI ESG Quality Score (0 - 10) for funds is calculated using the weighted average of the ESG scores of the fund's holdings. The Quality Score also considers the holdings' ESG rating trend and the fund's exposure to holdings that are ESG leaders and laggards.⁷ The distribution of the Fund ESG Quality Scores and ESG Ratings are examined across the universe of fund's under MSCI ESG Research's coverage (Exhibit 6,7).

⁷ The MSCI ESG Rating for funds is designed to measure the resiliency of portfolios to long-term ESG risks and opportunities. The highest-rated funds consist of issuers with leading or improving management of key ESG risks. The ESG Rating is calculated as a direct mapping of ESG Quality Scores to letter rating categories. The ESG Ratings range from Leader (AAA, AA), Average (A, BBB, BB) to Laggard (B, CCC).

Exhibit 7: Fund ESG Rating Distribution



Source: MSCI ESG Research LLC as of April 30, 2021, number of mutual funds: Equity: 18,682; Bond: 8,660; Mixed Assets: 11,719; Money Market: 732; Alternatives: 598. Real Estate: 3; Other: 42

Key Takeaways:

- » Most of our mutual funds universe (84%) exhibited an average ESG Rating (A, BBB, BB).
- » Leader funds (AAA, AA) represented 15.2% of funds globally, of which the majority – 76.3% of AAA- and AA-rated funds – were domiciled in Europe.
- » Dividing our universe of mutual funds coverage by ratings revealed that the highest-rated equity and bond mutual funds were Europe-focused. Globally, 63.5% of AAA-rated mutual funds had a European focus (Exhibit 8). In fact, investors would be hard-pressed to find Leader funds focused on other regions.
- » Funds with a focus on the Asian markets overwhelmingly accounted for the laggards (B-, CCC-rated), or 72.2% of the laggard mutual funds in our universe. This is primarily because companies in Asia (largely operating in emerging markets) are generally in the early stages of implementing sustainability in their business practices relative to peers operating in Western markets. In other words, in any given industry group, companies operating in Asia, on average, perform lower on key ESG issues versus other regional peers.



Exhibit 8: Funds Split by ESG Rating and Geographic Focus

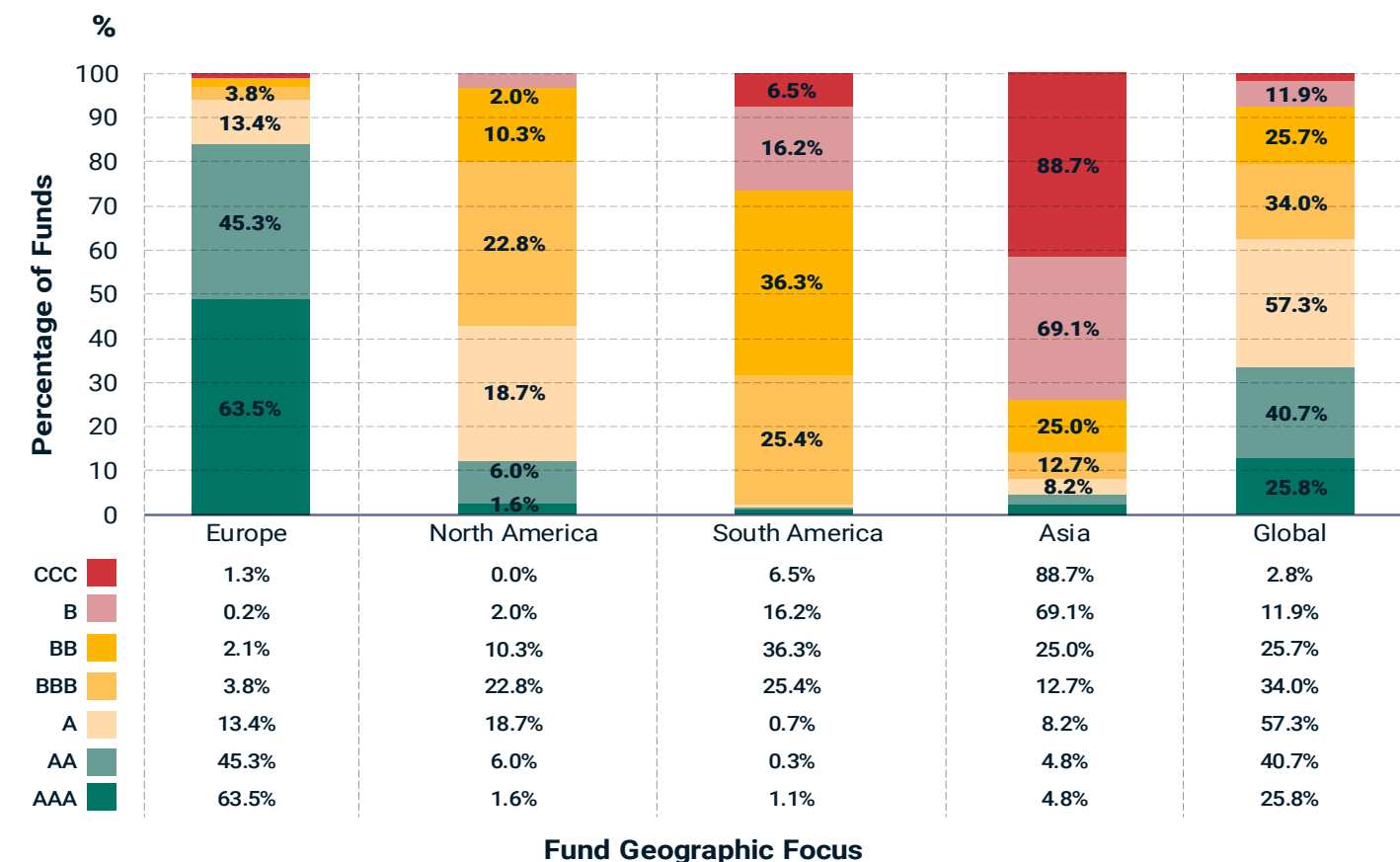
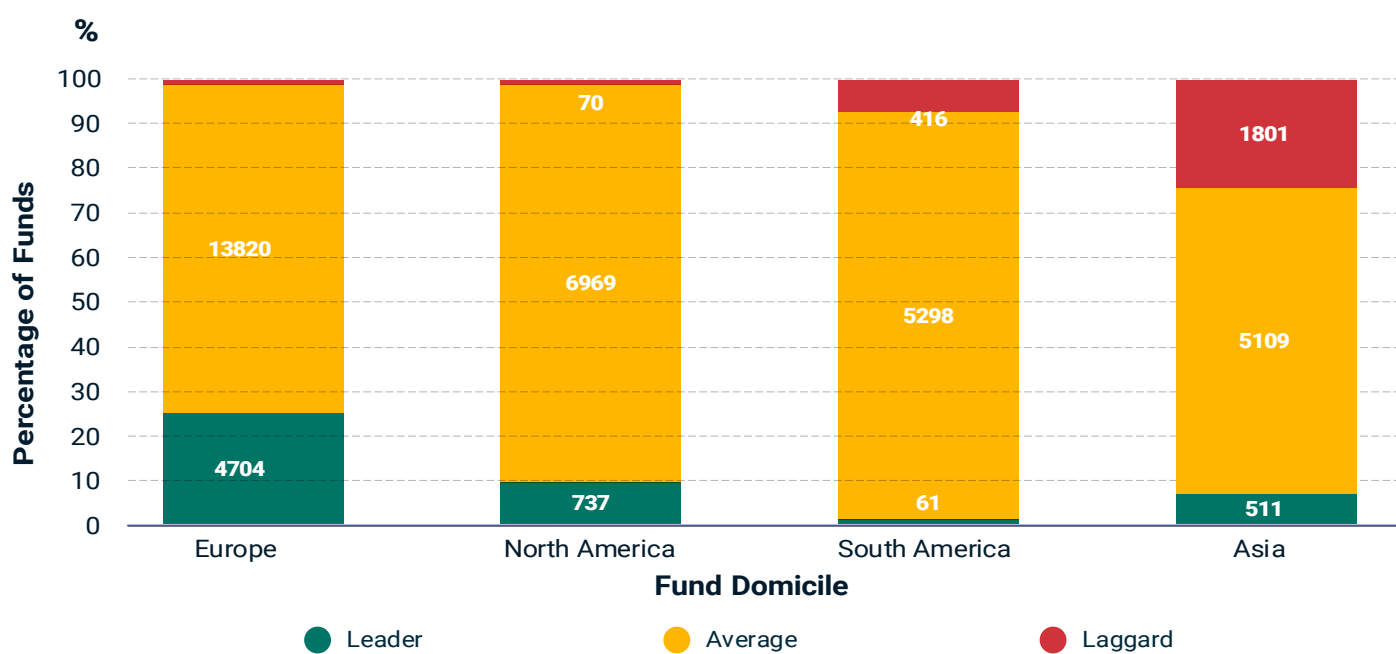


Exhibit 9: Fund Domiciles - Leaders and Laggards



Source: MSCI ESG Research LLC as of April 30, 2021, number of mutual funds: Equity: 18,682; Bond: 8,660; Mixed Assets: 11,719; Money Market: 732; Alternatives: 598. Real Estate: 3; Other: 42



The **E**, **S** and **G**

Delving in further, we examined how funds performed globally across our **Environmental, Social and Governance (ESG)** factors. Our ESG fund ratings look at the underlying investee companies' management of and exposure to key risks and opportunities across the ESG spectrums.

Key Takeaways:

- » Across E, S and G scores, the majority of funds globally scored within 4-6. Notably no funds scored less than 2 on Environmental and Governance factors, or less than 3 on Social factors.
- » Scoring strongly on S and G scores was harder for funds than it was on Environmental scores. In fact, dividing the funds by their underlying geographic focus revealed that the most variety exists in Environmental scores, where every region exhibited a spread across the scoring range. On Environmental score 79.4% of funds scored between 5-7. Funds with a European focus were the strongest performing with 46.3% of funds scoring 6 and above.
- » Social and Governance scores exhibited less spread;; 88.5% of mutual funds within our coverage scored between 4-6 on the Social score, and 52.8% of funds scored 3-5 on Governance score. Funds with a European or Global focus were most exposed to higher Social and Governance scores, while funds with an Asian and South American focus were the main laggards.
- » Better average performance on Environmental score reflects the general prominence of E over S and G in the ESG mutual fund product landscape and may indicate that challenges exist in structuring products to optimize Social and Governance attributes.

Exhibit 10: Mutual Funds – Distribution of E, S and G Scores

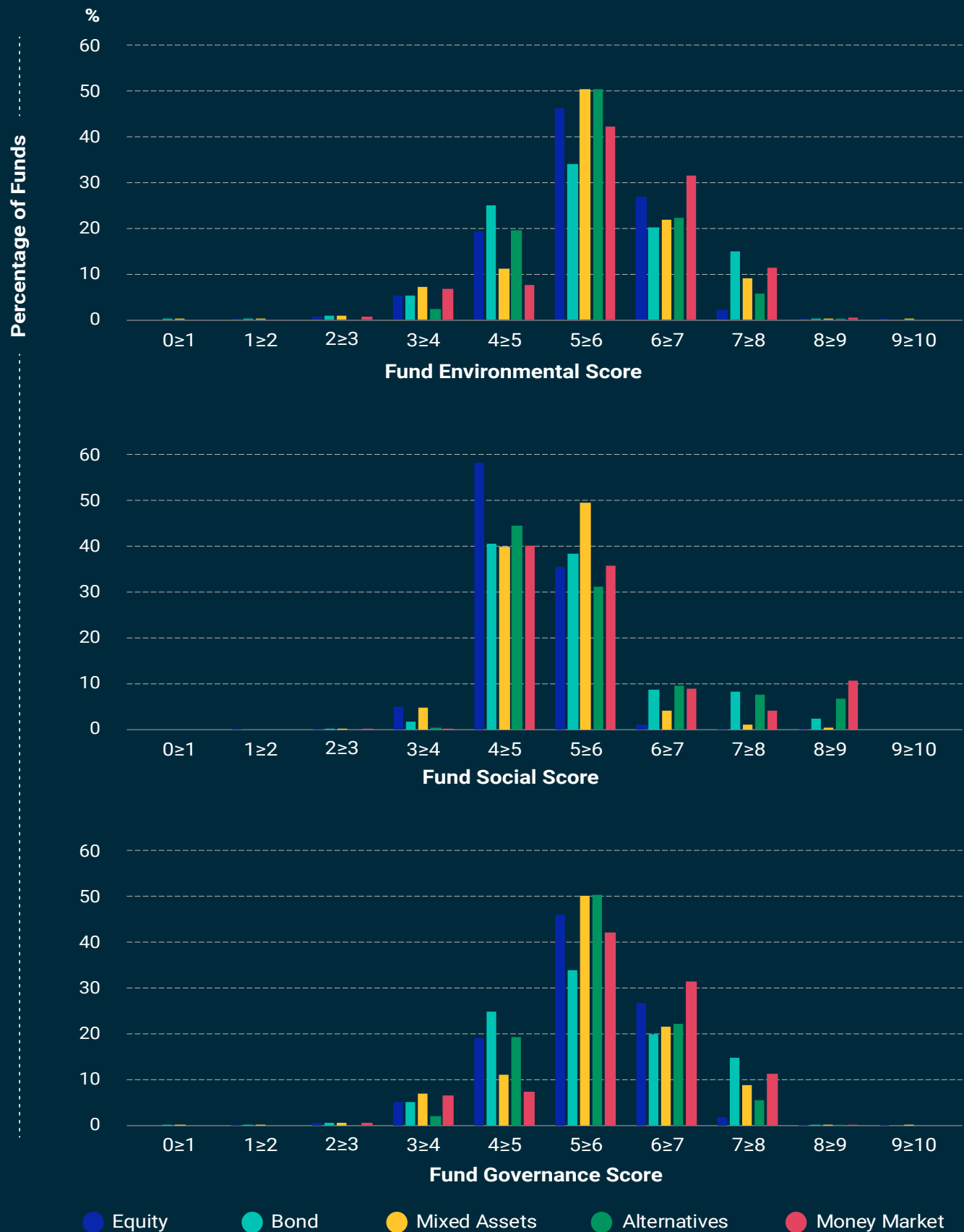
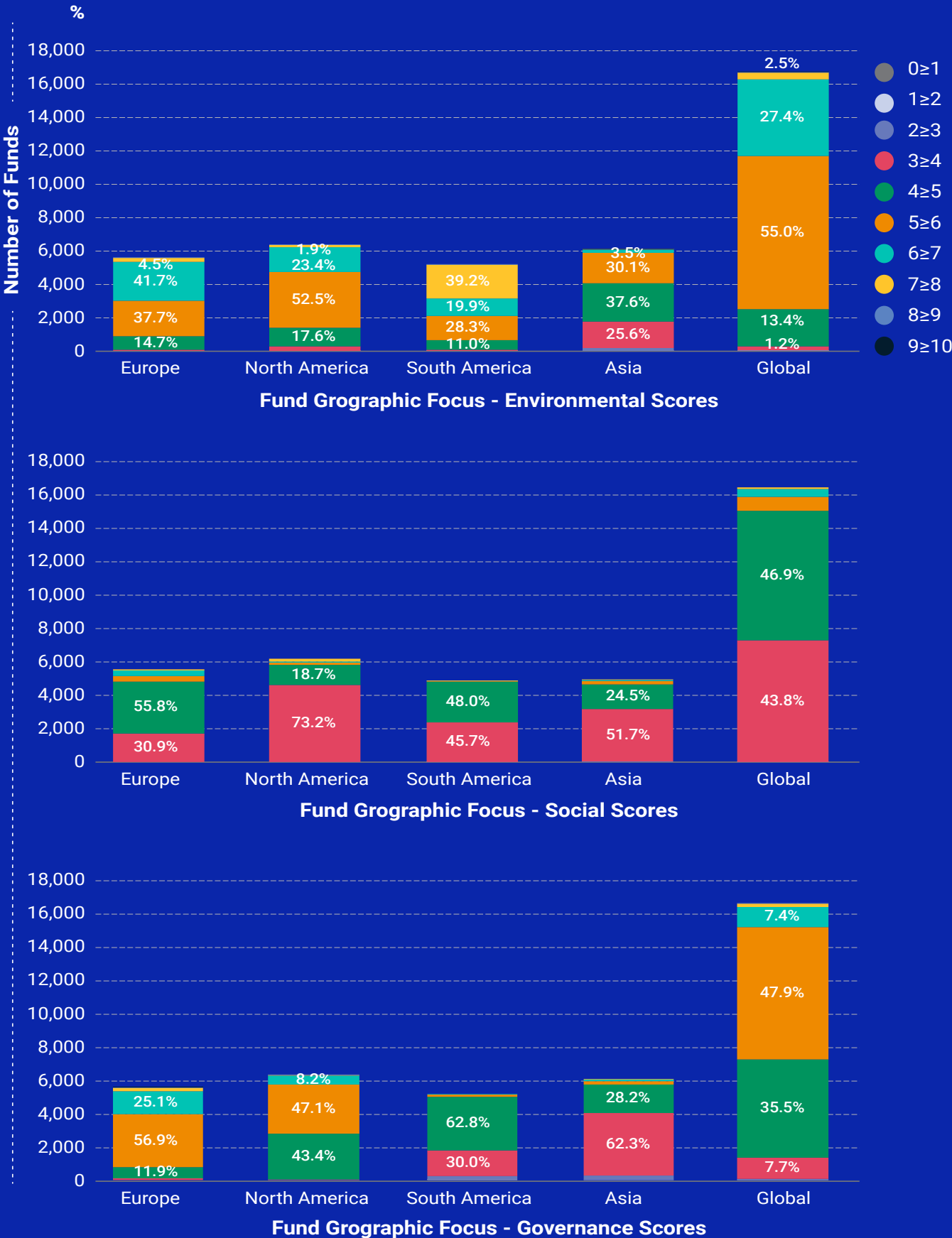


Exhibit 11: Mutual Funds – Distribution of E, S and G Scores



Carbon Exposure

The MSCI Fund Weighted Average Carbon Intensity (WACI) measures the carbon intensity of a fund's investee companies. This figure represents the estimated greenhouse gas (GHG) emissions per USD 1 million in sales across the fund's holdings (units of tons CO2 equivalent/USD \$M Sales). This allows for carbon emissions comparisons among funds of different sizes.

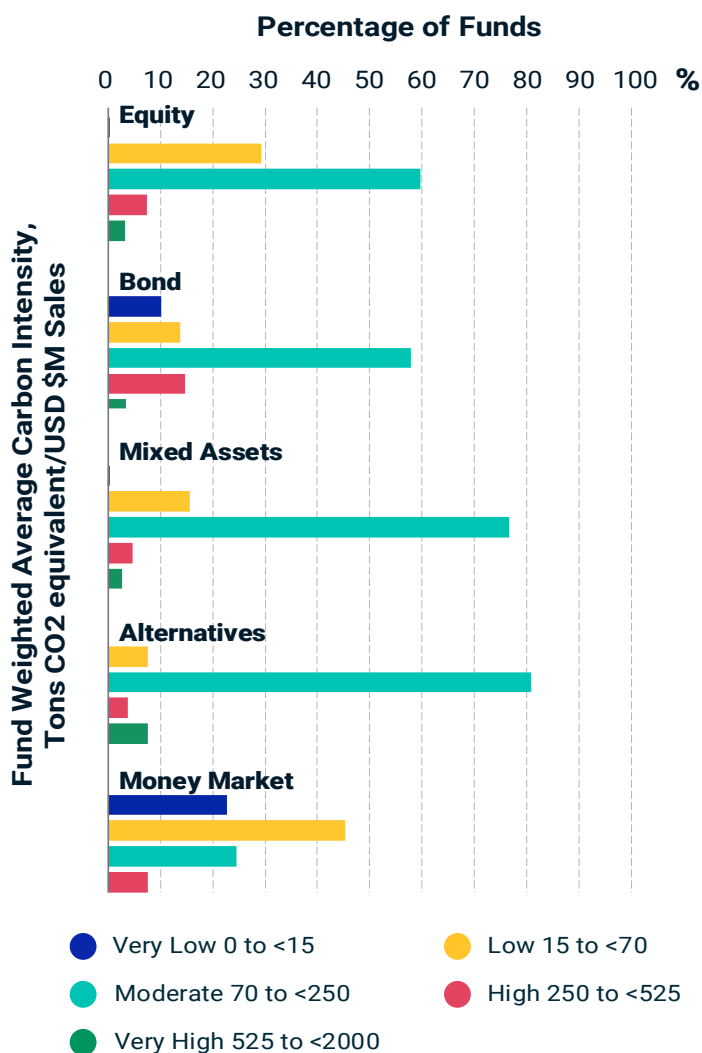
The carbon intensity of a company is highly dependent on the industry it operates in. Industry exposures also vary between countries and regions. To adjust for this, the universe of mutual funds within our coverage was geographically subdivided based on the country/region/sector focus of the fund. The average WACI of funds based on their underlying country/region of focus is ranked and tabulated from most-carbon-intensive to least-carbon-intensive (Exhibit 14).

Key Takeaways:

- » Most funds globally exhibited a moderate carbon intensity in the range of 70-250 Tons of CO2 equivalent/USD \$M Sales.
- » For equity funds, the lowest-carbon-intensity funds (WACI <20) were largely those focused on sectors unassociated with manufacturing and extractive activities such as financials, healthcare, and communication services. Funds focused on utilities, energy and other extractive industries exhibited the highest carbon intensities.
- » In bond funds, emerging markets and high yield funds exhibited the highest carbon intensities, the latter particularly due to energy companies forming a substantial segment of the high yield issuance universe.
- » For funds focused on companies operating in the developed markets, those that invested in companies operating in Nordic countries had the lowest carbon intensities. The size of the underlying market being tracked can have a significant impact on the fund's carbon intensity: Funds tracking country indexes with very few holdings can exhibit very high or low intensities, essentially due to lack of industry diversification.

- » Emerging market focused funds on average exhibited a higher carbon intensity, roughly three times (3.2x) that of developed market funds (463.0 tons vs. 144.3 tons CO2 equivalent/USD \$M Sales).

Exhibit 12: Mutual Funds – Distribution of Fund Weighted Average Carbon Intensity, Tons CO2 Equivalent/USD \$ Million Sales



Source: MSCI ESG Research LLC as of April 30, 2021, number of mutual funds: 40,436

Exhibit 13: Average Fund WACI by Underlying Geographic Focus, Tons CO² Equivalent/USD\$ Million Sales

Developed Markets		Emerging Markets	
Portugal	275.4	Saudi Arabia	1625.1
Iberia	254.3	Russia	861.7
Canada	249.5	Argentina	818.9
Italy	243.9	Hungary	729.6
Finland	242.8	India	648.7
Korea	241.3	Thailand	598.2
Germany	230.7	South Africa	589.9
Australia	204.9	Greece	587.7
Spain	177.8	Colombia	515.4
Austria	176.4	Eastern Europe	513.8
Norway	173.7	Indonesia	508.6
United States of America	157.8	Malaysia	502.9
North America	151.8	Global Emerging Markets	495.8
Europe exc UK	150.6	Latin America	470.1
Europe	140.9	Chile	444.7
EuroZone	137.4	Slovakia	436.1
Singapore	133.1	Latin America Misc	408.8
Belgium	132.7	Peru	378.2
France	131.8	Philippines	342.9
Netherlands	126.0	Hong Kong	329.9
Europe exc Switzerland	125.4	Romania	327.1
Ireland	114.6	Brazil	324.7
Luxembourg	114.2	Asia Pacific ex Japan	273.5
United Kingdom	113.1	Africa	269.2
Switzerland	100.8	Turkey	256.2
Australasia	96.5	Taiwan	238.6
Japan	93.8	Czech Republic	204.9
Nordic	76.7	Middle East	202.8
Israel	50.9	Greater China	195.2
Denmark	37.2	China	167.0
Scandinavia	36.2	United Arab Emirates	87.8
New Zealand	34.4		
Sweden	34.2		

- Very Low 0 to <15
- Low 15 to <70
- Moderate 70 to <250
- High 250 to <525
- Very High 525 to <2000

Source: MSCI ESG Research LLC
as of April 30, 2021, number of
mutual funds: 40,436

Exhibit 14: Average Fund WACI by Equity Focus⁸, Tons CO2 Equivalent/USD\$ Million Sales

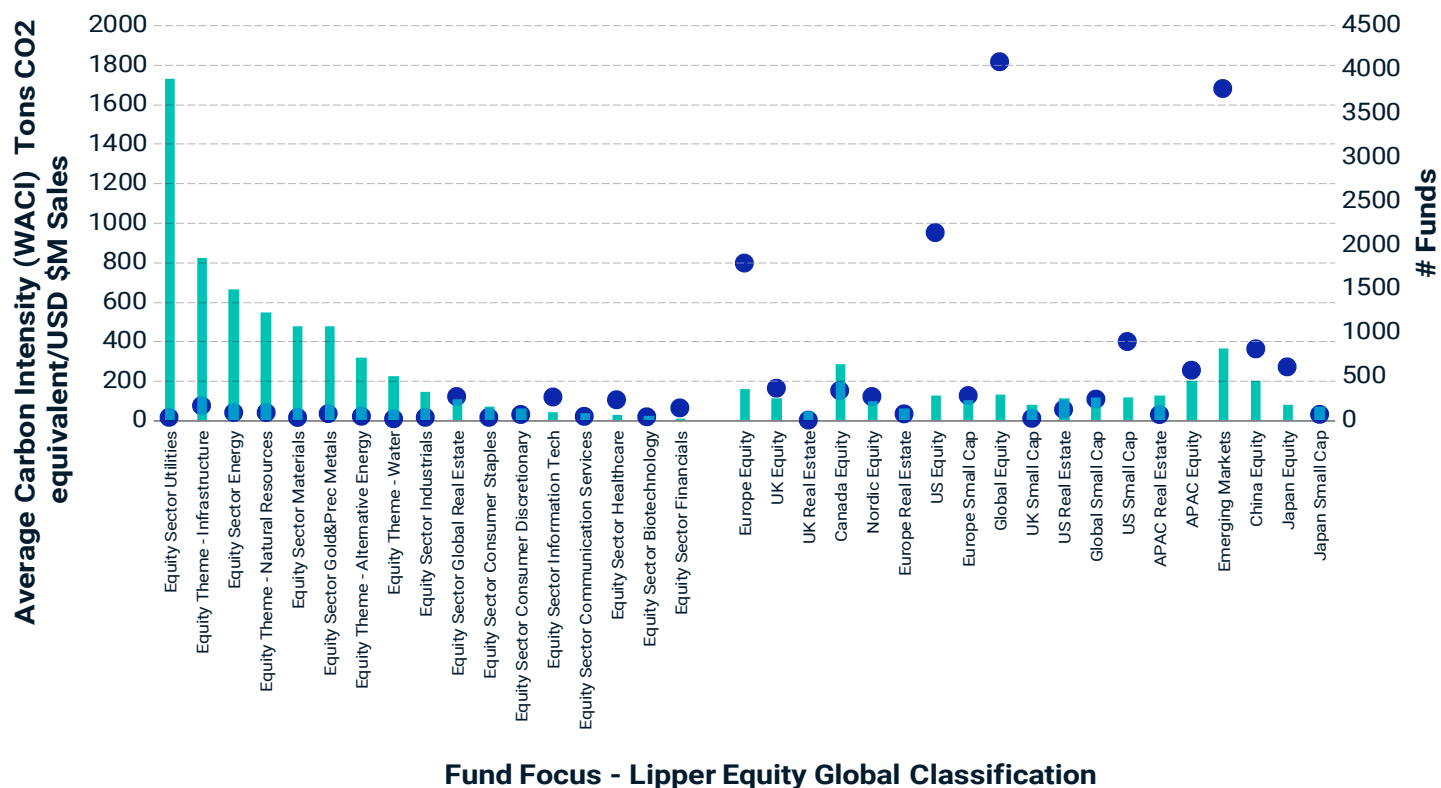
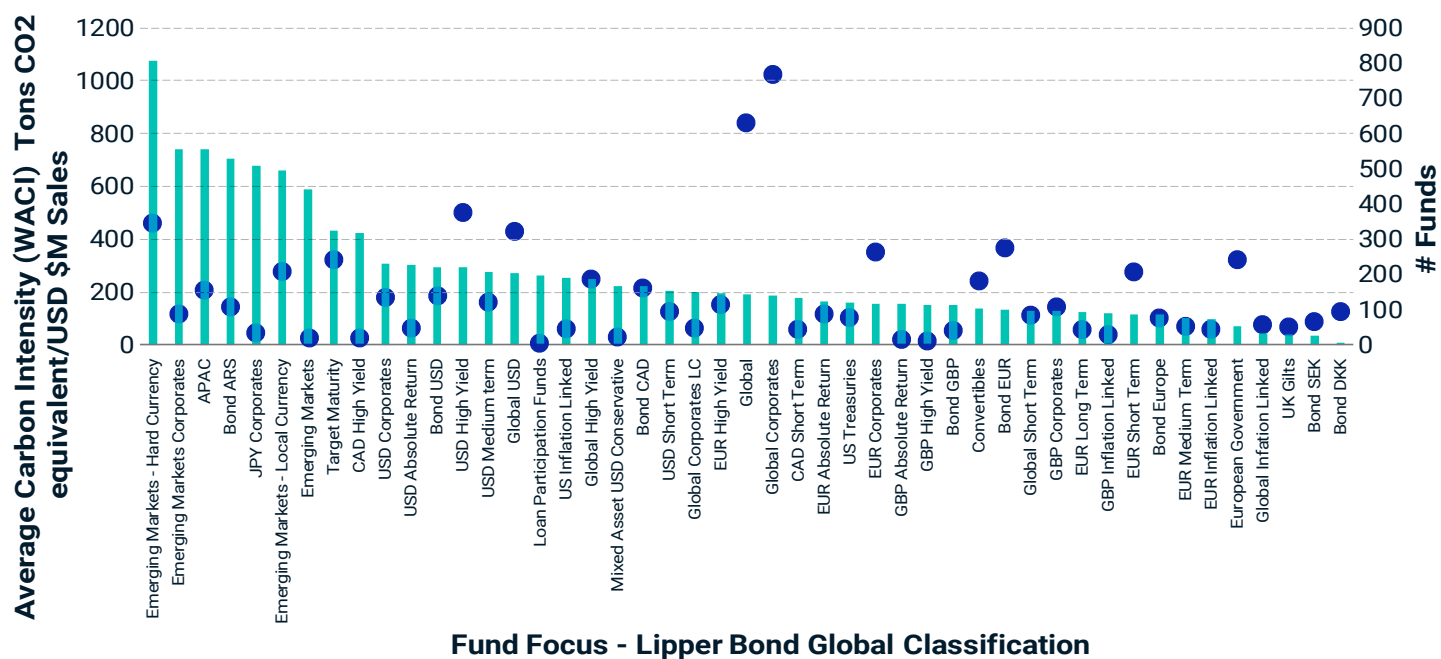


Exhibit 15: Average Fund WACI by Bond Focus⁸, Tons CO2 Equivalent/USD\$ Million Sales



● Average Carbon Intensity ● # Funds LC= Local Currency HC= HardCurrency

Source: Refinitiv/Lipper and MSCI ESG Research LLC as of April 30, 2021, eligible funds categorized from universe of 40,436 mutual funds per the [Refinitiv Lipper Global Classification](#).

8 Refinitiv Lipper Global Classification

Board Governance and Female Participation

The **Fund Board Flag** metric shows the percentage of a fund portfolio's underlying market value exposed to companies ranking "below average" relative to global peers based on our assessment of board structure and effectiveness.

- » The underlying market value of most fund's globally exhibited a Board Flag % range within 0% to 20%.
- » European funds exhibited the lowest average Board Flag % of 7.3%, while funds with an Asian focus exhibited the highest at 28.2%. Japan and APAC focused funds stood out with the highest average Board Flag % in excess of 30%. This means the average Japan and APAC- focused fund was invested in companies that score lower on the Fund Board Flag metric.
- » In sector focused funds, communication services, global real estate and consumer discretionary funds demonstrated the highest average Board Flag %, in excess of 20%, while Agribusiness, Utilities, Gold & Precious Metals performed the most favorably.

Exhibit 16: Mutual Funds – Distribution of Board Flag %

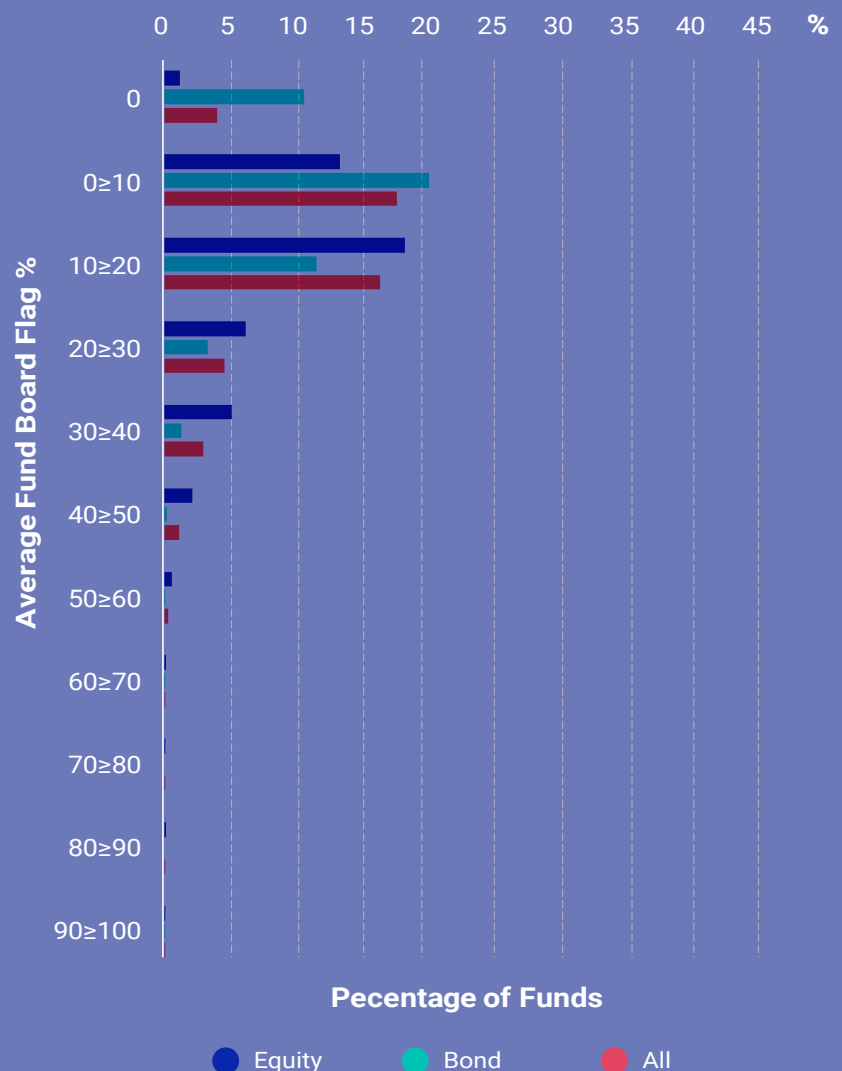
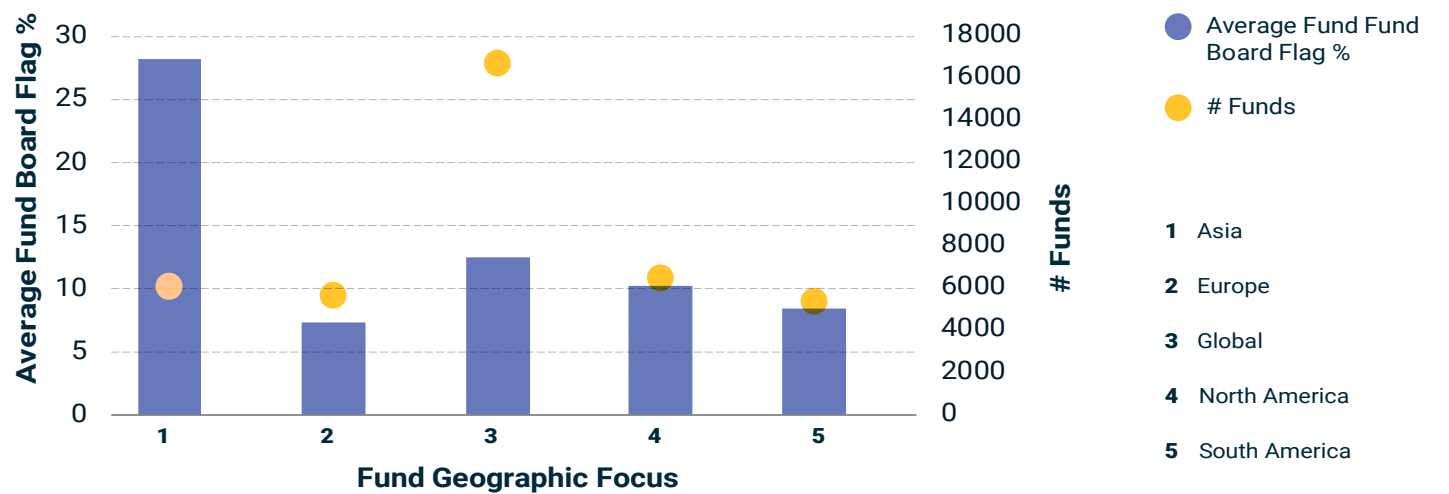
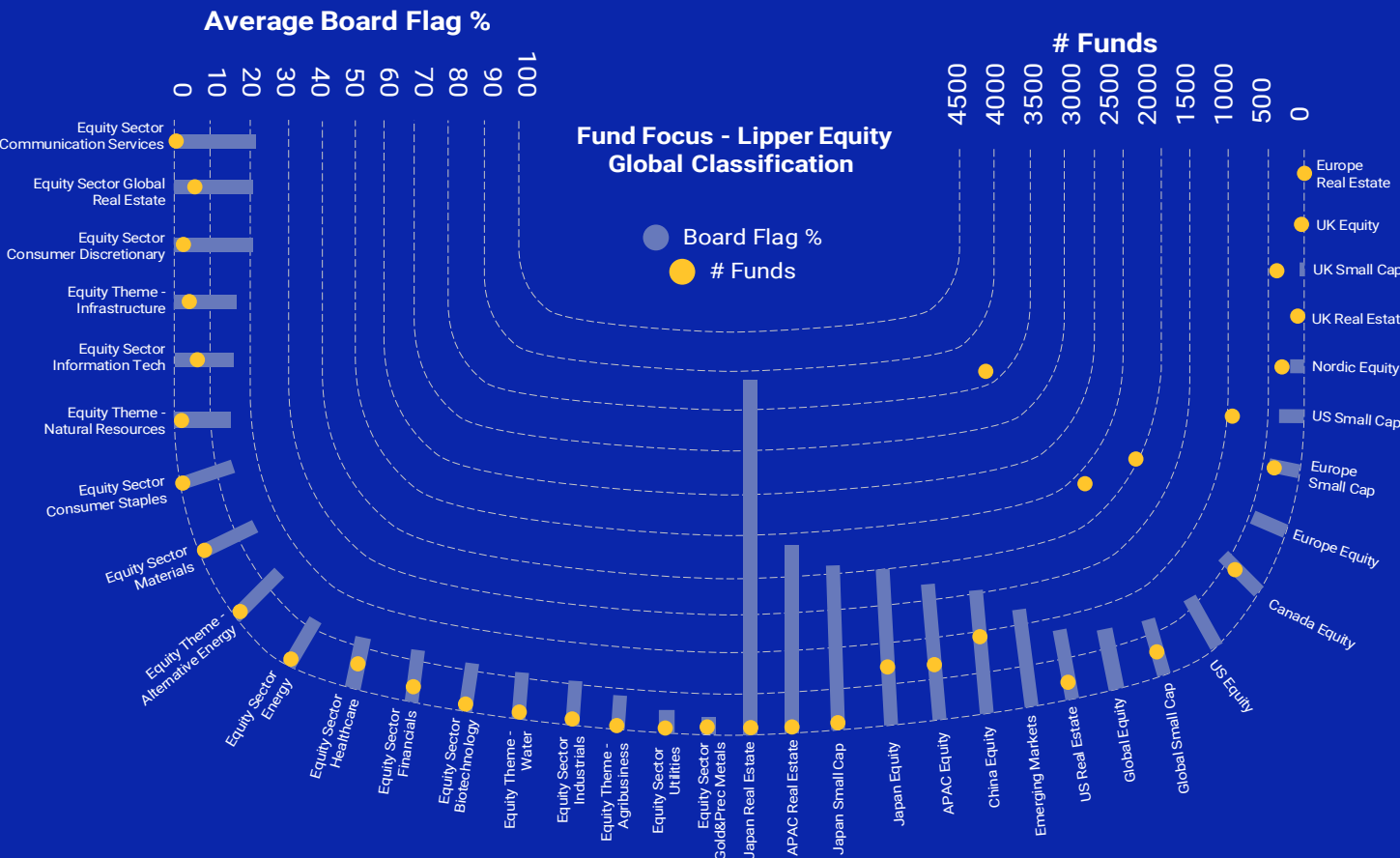


Exhibit 17: Fund Board Flag % - All Mutual Funds in Coverage



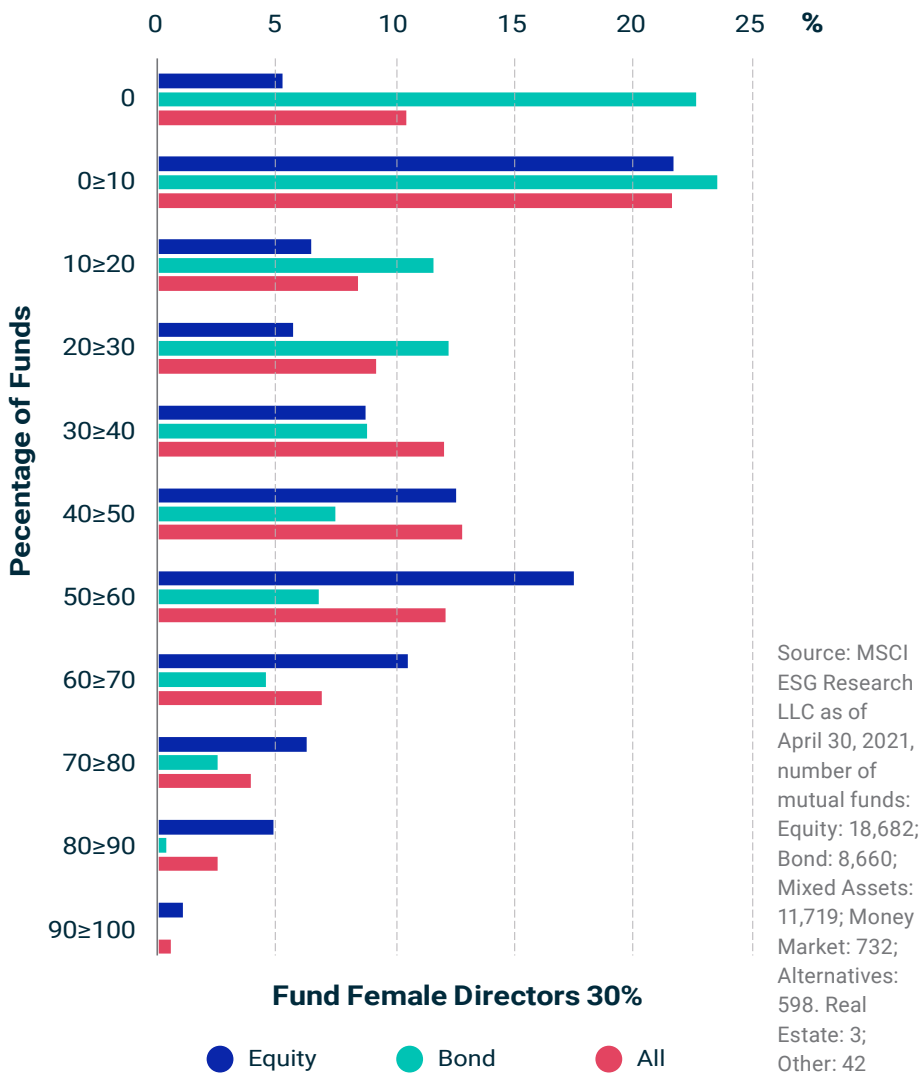
Source: MSCI ESG Research LLC as of April 30, 2021, number of mutual funds: 40,436

Exhibit 18: Average Fund Board Flag % by Equity Focus



Source: Refinitiv/Lipper and MSCI ESG Research LLC as of April 30, 2021, eligible funds categorized from universe of 40,436 mutual funds per the Refinitiv Lipper Global Classification

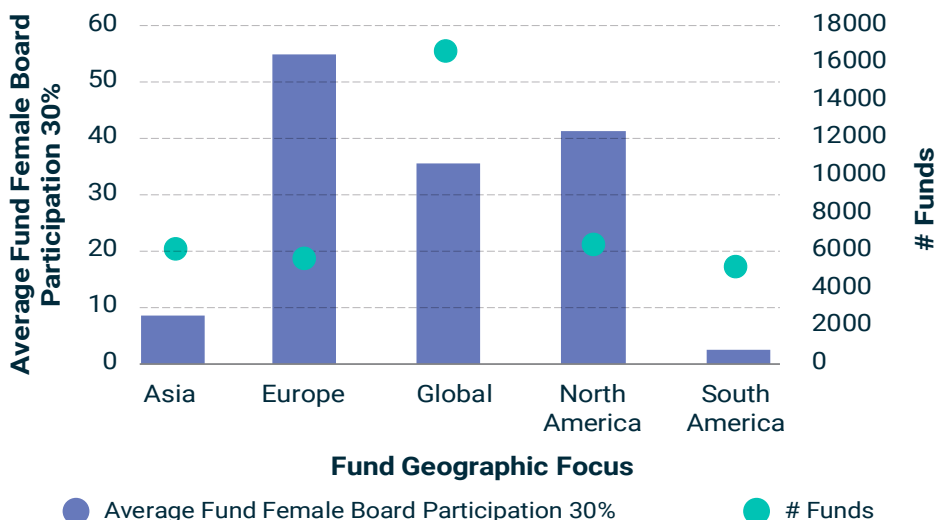
Exhibit 19: Distribution of Women on Boards Over 30% for Funds



The **Fund Females Representing 30% of Directors** metric is the percentage of a fund's underlying market value exposed to companies where women comprise at least 30% of the board of directors.

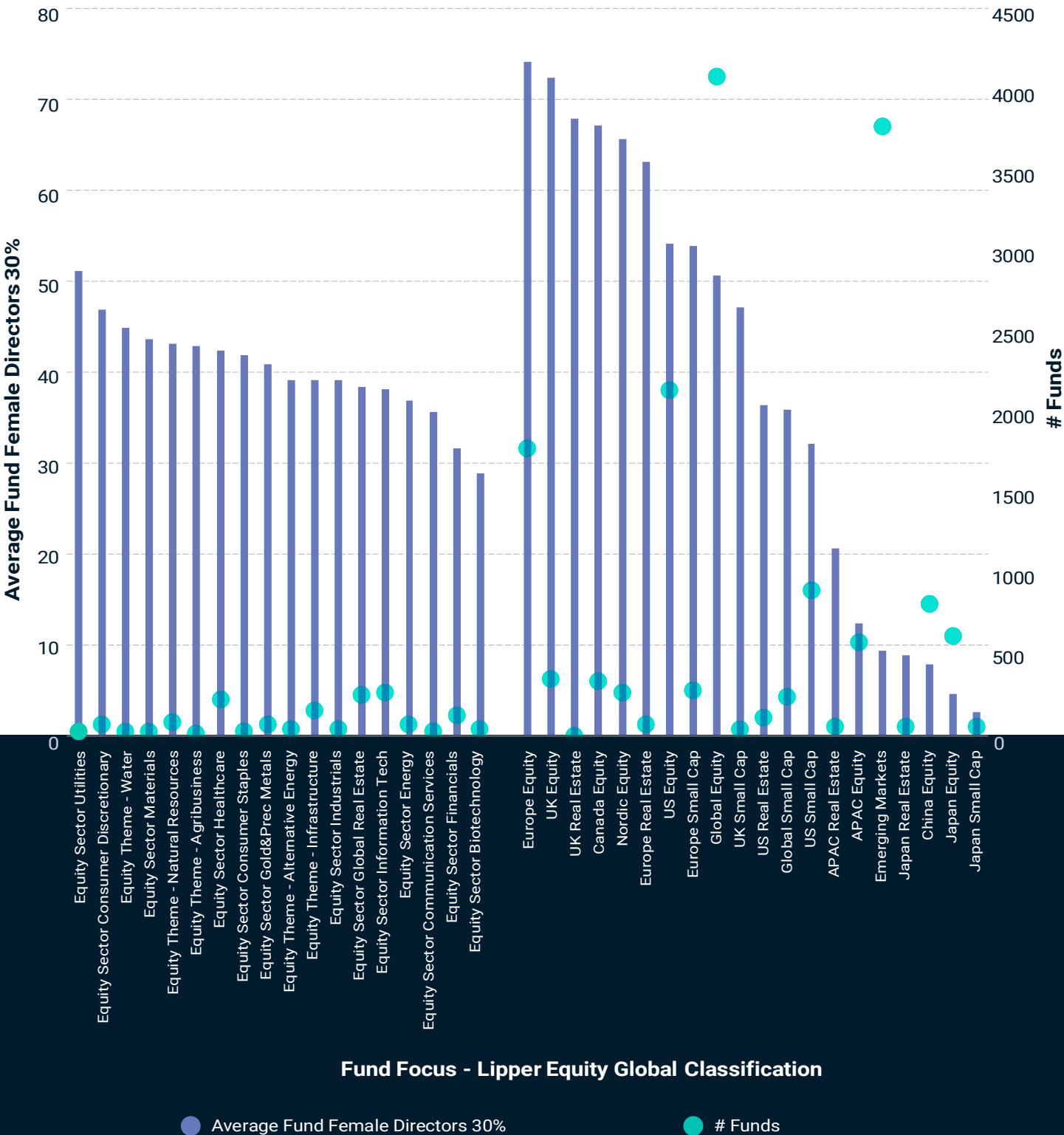
- » Most global companies that funds invest in have low female board participation. Exhibit 19 shows the global distribution of female board participation at most companies falls below the 50% mark. On the left-hand-side, funds scoring 0 represent funds that invest in no companies with at least 30% female board directorship. On the right-hand-side are funds with 90% to 100% of investee companies demonstrating at least 30% female board directorship. The portfolios of most funds globally (74.3%) exhibited female board participation of under 30%.
- » Regional disparities do exist: Mutual funds focusing on companies operating in Europe averaged the highest female board participation of at least 30%. (Exhibit 20). Asia-focused funds, in particular China and Japan, averaged the lowest female board participation (Exhibit 21).

Exhibit 20: Women on Boards Over 30% - All Mutual Funds in Coverage



Source: MSCI ESG Research LLC as of April 30, 2021, number of mutual funds: 40,436

Exhibit 21: Fund Female Directors 30% by Equity Focus



Source: Refinitiv/Lipper and MSCI ESG Research LLC as of April 30, 2021, eligible funds categorized from universe of 40,436 mutual funds per the Refinitiv Lipper Global Classification.



Global Norms

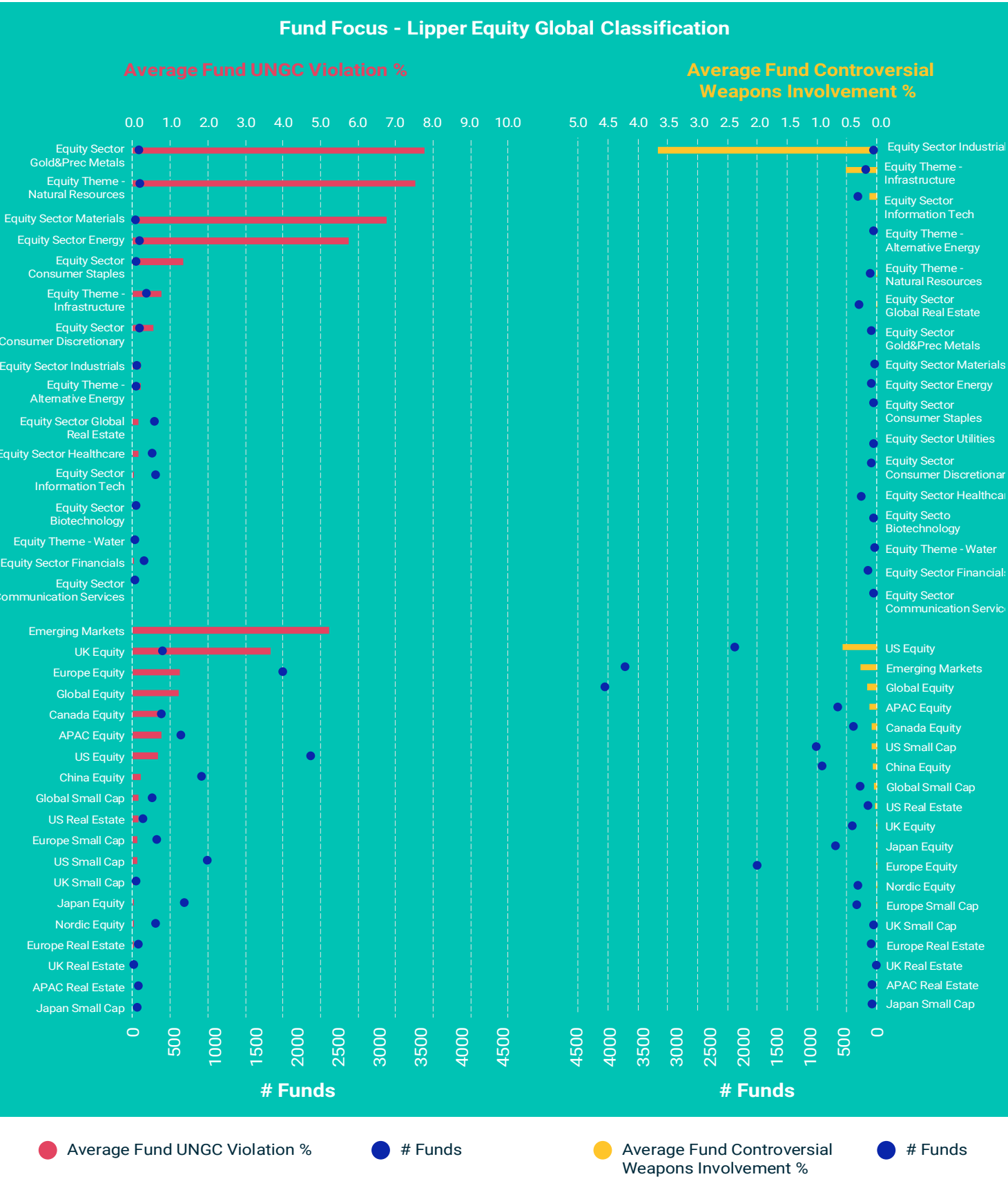
We also assessed the exposure of mutual funds in our coverage universe to violations of global norms.

The **Fund Global Compact Compliance Violation** metric shows the percentage of a fund's market value exposed to companies that violate the UN Global Compact (UNGC) principles: human rights, labor standards, the environment and anti-corruption. We also looked at the percentage of a fund portfolio's market value exposed to controversial weapons, through companies with ties to cluster munitions, landmines, biological/chemical weapons, depleted uranium weapons, blinding laser weapons, incendiary weapons, and/or weapons using non-detectable fragments.

- » The majority of funds globally did not exhibit high UNGC violations; over 95% of funds exhibited violations in the range of 0-10%.
- » The funds that averaged the highest violations were invested in extractive sectors such as natural resources mining, energy, and materials, along with those that focused on emerging markets.
- » Very few funds globally demonstrated meaningful controversial weapons involvement; 99% of funds exhibited between 0-1% involvement. The funds with higher involvement in excess of 10% were specifically focused on aerospace, defense, and ammunitions industries.

Exhibit 22: Fund Global Compact Compliance Violation % by Equity Focus

Exhibit 23: Fund Controversial Weapons Involvement % by Equity Focus



Source: Refinitiv/Lipper and MSCI ESG Research LLC as of April 30, 2021, eligible funds categorized from universe of 40,436 mutual funds per the Refinitiv Lipper Global Classification.

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