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Global Sustainable Fund Flows: Q3 2022 in Review Flows fell further but held up better than the broader market.

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Key Takeaways

- ► Global sustainable funds attracted USD 22.5 billion of net new money in the third quarter of 2022, less than the revised USD 33.9 billion of inflows in the second quarter.
- Amid investor concerns over a global recession, inflationary pressures, rising interest rates, and the conflict in Ukraine, sustainable funds still held up better than the broader market, which experienced USD 198 billion of net outflows over the period.
- Assets in global sustainable funds slipped to USD 2.24 trillion at the end of September, from the restated USD 2.28 trillion in June. The 1.6% drop was less pronounced than the 7.5% decline for the broader market.
- Product development slowed down in the third quarter after stabilizing in the first half of 2022. An estimated 148 new sustainable funds hit the shelves globally.
- ► In Europe, the quasi-totality (96%) of the net new money (USD 22.6 billion) poured into passive funds, while active sustainable products registered the worst quarter in at least five years.

The Global Sustainable Fund Universe

The global sustainable fund universe encompasses open-end funds and exchange-traded funds that, by prospectus or other regulatory filings, claim to use environmental, social, or governance factors as a central focus of their investment process.¹

In August 2022, Morningstar enhanced its Sustainable Attributes Framework, which is used to build the global sustainable fund universe. The related changes are reflected in this report. For continuity and comparability purposes, we have revised the global sustainable fund universe as reported in the first and second quarters, although the revisions only mainly affect Europe. (More details on the new Sustainable Attributes Framework and related changes are included in the Appendix).

The global universe is divided here into three segments by domicile: Europe, United States, and Rest of World. There is more-granular data available in this report for Canada, Australia/New Zealand, and Japan. China, Hong Kong, India, Indonesia, Malaysia, Singapore, Taiwan, Thailand, and South Korea are grouped under the Asia ex Japan label because of their relatively low assets.

Finally, the global sustainable fund universe excludes money market funds, feeder funds, and funds of funds to avoid double-counting and inflating flows and assets. We make an exception for Japan and

Note: Morningstar's definition of a sustainable investment differs from the definition under the European Union's Sustainable Finance Disclosure Regulation, which defines "sustainable investments" at a holding level.

South Korea to better reflect the actual flow situation there, as many Japanese funds of funds invest in European funds.

This report examines recent activity in the global sustainable fund universe and details regional flows, assets, and launches for the third quarter of 2022. A summary is provided in Exhibit 1.

03 2022	Flows	Asset	ts	Fun	ds
Region	USD Billion	USD Billion	% Total	#	% Total
Europe	22.6	1,851	82%	5,156	76%
United States	0.5	272	12%	580	9%
Asia ex-Japan	-0.7	49	2%	397	6%
Australia/New Zealand	0.4	23	1%	197	3%
Japan	-0.5	23	1%	232	3%
Canada	0.2	25	1%	215	3%
Total	22.5	2,244		6,777	

Exhibit 1 Global Sustainable Funds' 03 2022 Statistics

Source: Morningstar Direct, Manager Research. Data as of September 2022.

Sustainable Fund Inflows Plummet but Again Hold Up Better Than Their Conventional Peers The global universe of sustainable funds attracted USD 22.5 billion of net new money in the third quarter of 2022 compared with a revised USD 33.9 billion of inflows in the second quarter. This contraction also shows when looking at quarterly organic growth rates. Calculated as net flows relative to total assets at the start of a period, global sustainable funds saw their organic growth rate decline to 1% in the third quarter from over 1.2% in the second quarter.

Nonetheless, flows in sustainable funds held up better than those in the broader market. In comparison, the overall global fund universe suffered outflows of USD 198 billion in the third quarter of 2022, after suffering USD 278 billion of outflows in the second quarter. Macroeconomic headwinds, including enduring inflationary pressures, rising interest rates, disruption to global energy supply, and a looming global recession have become more acute in the course of the third quarter, spelling trouble for global fund markets.



Exhibit 2 Quarterly Global Sustainable Fund Flows (USD Billion)

Source: Morningstar Direct, Manager Research. Data as of September 2022.

The slump in net new money into sustainable funds was felt in most regions. Some parts of the world even experienced outflows.

Europe, the biggest market for sustainable funds, registered a drop in net new money: European investors poured USD 22.6 billion into sustainable products in the third quarter, a historical low since the first quarter of 2020 when the novel coronavirus pandemic first struck.

U.S.-domiciled sustainable funds recovered from the USD 1.6 billion outflow in the second guarter and registered a small net inflow of USD 459 million. In Australia and New Zealand, net inflows clocked positive too, albeit lower than in the previous quarter, at USD 445 million. The two geographies experiencing outflows were Asia ex Japan and Japan, which bled USD 660 million and USD 493 million, respectively.

Global Assets Slip Slightly but Hold Better Than the Overall Fund Market Global sustainable fund assets slipped slightly to USD 2.24 trillion as of September 2022 from the restated USD 2.28 trillion at the end the second quarter. This 1.6% decline was the third consecutive drop since the first quarter of 2020. Nevertheless, sustainable fund assets held up better than the overall global fund market, which saw its assets shrink by 7.5% in the three months through September 2022.

Europe continued to make up the lion's share of the sustainable fund landscape with 82% of global sustainable fund assets. It also remains by far the most developed and diverse ESG market, followed by the U.S., which housed 12% of global sustainable fund assets through September 2022. Asia ex Japan, of which China is the biggest sustainable market with more than 68% of the region's asset base, ranks third in terms of sustainable fund market size.



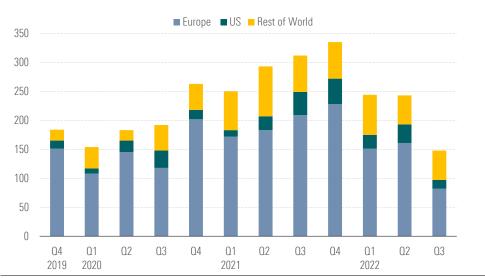
Exhibit 3 Quarterly Global Sustainable Fund Assets (USD Billion)

Source: Morningstar Direct, Manager Research. Data as of September 2022.

Global Fund Launches

Product development slowed in the third quarter after stabilizing for the first half of 2022. An estimated 148 new sustainable funds hit the shelves globally. However, this number will likely be restated upward in future reports as we identify more launches and additional ones are reported to Morningstar.





Source: Morningstar Direct, Manager Research. Data as of September 2022.

Europe and the U.S. saw the most new sustainable funds hit the shelves last quarter than in the previous quarter. In the rest of the world, fund launches picked up only in Asia ex Japan. Canada and

Japan experienced a noticeable slowdown in product development after several quarters of intense activity.

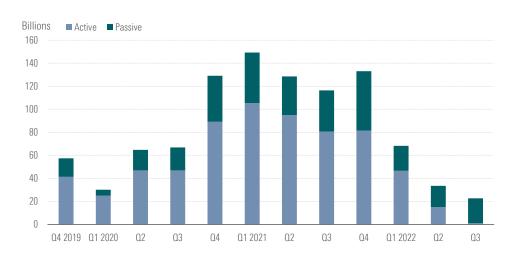
Quarterly Statistics per Domicile

Europe

Flows Continue their Downward Spiral but Remain Positive

In the third quarter of 2022, the European sustainable fund universe (as defined in the Appendix) attracted USD 22.6 billion in net inflows, plunging further from the readjusted USD 33.4 billion net inflows of the previous quarter.² Passive strategies pocketed almost the entirety (over 95%) of the inflows.

Exhibit 5 European Sustainable Fund Flows (USD Billion)



Source: Morningstar Direct, Manager Research. Data as of September 2022. Data for Q1 and Q2 was retreated using the new framework for ease of comparison. Under the old framework, flows in Q1 and Q2 were USD 71.7 billion and USD 30.7 billion, respectively.

This downward trend was further confirmed when looking at organic growth rates. Calculated as net flows relative to total assets at the start of a period, European sustainable funds saw their organic growth rate slide minorly to 1.2% in the third quarter of 2022 from 1.5% in the second quarter and 2.8% in the first quarter. Until the end of last year, quarterly organic growth rates were consistently above 5% (except in the first quarter of 2020, when it fell to 3.5%).

Yet, in the third quarter, European sustainable products fared better than their conventional peers. Against a backdrop of continued geopolitical concerns with the Russian invasion of Ukraine, high inflation, interest-rate hikes, and a looming global recession, European conventional funds suffered USD 124 billion of net outflows, plummeting further from the USD 104 billion of outflows registered in the

 $^{^2}$ Under the previous methodology, net inflows in the first and second quarter were USD 71.7 billion and USD 30.7 billion, respectively.

second quarter. Overall European fund flows organic growth rates declined further, from negative 0.5% in the second quarter to negative 0.9% in the third quarter.

As demonstrated in the last two quarters — as well as in 2020 at the start of the pandemic — sustainable fund flows demonstrated overall resilience against market volatility compared with traditional peers as sustainability-focused investors — who are typically values-driven and long-term-oriented — are slower to pull money from funds they are invested in.

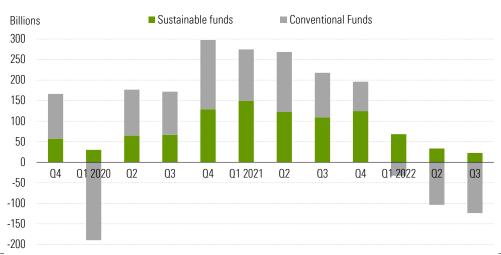


Exhibit 6a Sustainable Fund Flows Compared With Conventional Fund Flows (USD Billion)

Source: Morningstar Direct, Manager Research. Data as of September 2022. Sustainable fund flow data for Q1 and Q2 was retreated using the new framework for ease of comparison. Under the old framework, flows in Q1 and Q2 were USD 71.7 billion and USD 30.7 billion, respectively.

Exhibit 6b Sustainable Fund Flows Con	pared With Conventional Fund Flows by	Asset Class (USD Billion)
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USD Billion	Sustainab	le Funds	Conventio	nal Funds	Overall Fun	d Universe
	02 2022	03 2022	02 2022	03 2022	02 2022	03 2022
Allocation	5.5	0.2	-2.8	-8.7	2.7	-8.5
Alternative	0.3	0.3	0.3	-5.3	0.6	-5.0
Commodities	-0.1	0.1	-2.7	-11.0	-2.8	-10.9
Convertibles	-0.1	-0.1	-3.6	-1.8	-3.7	-2.0
Equity	21.3	10.8	-38.3	-69.6	-17.0	-58.7
Fixed Income	5.3	11.0	-56.7	-29.5	-51.4	-18.5
Miscellaneous	0.5	0.2	-1.8	1.6	-1.3	1.8
Property	0.8	0.3	1.3	0.0	2.1	0.2
Total	33.4	22.6	-104.3	-124.3	-70.9	-101.7

Source: Morningstar Direct, Manager Research. Data as of September 2022. Sustainable fund flow data for Q2 was retreated using the new framework for ease of comparison. Under the old framework, flows in Q2 were USD 30.7 billion.

Sustainable equity and allocation funds suffered the most in the third quarter, registering much lower inflows than in the second quarter, while fixed income showed signs of recovery after decreasing inflows for three consecutive quarters. Sustainable fixed-income funds garnered USD 11 billion or close

to half of the overall net new money poured into the European sustainable fund universe in the third quarter. Investors continued seeking global inflation-linked bond and global flexible bond strategies amidst entrenched high inflation across major developed economies.

Fixed income was another area where sustainable funds were much more resilient than their conventional counterparts in terms of flows. The latter spiraled further downward and bled almost USD 30 billion as investors were discouraged by interest-rate hikes, albeit alleviated from the USD 57 billion outflows registered in the second quarter.



Exhibit 7 European Sustainable Fund Flows by Asset Class

Source: Morningstar Direct, Manager Research. Data as of September 2022. Data for Q1 and Q2 was retreated using the new framework for ease of comparison. Under the old framework, flows in Q1 and Q2 were USD 71.7 billion and USD 30.7 billion, respectively.

Sustainable equity funds attracted USD 10.8 billion in the third quarter, half the previous quarter's inflows. Yet this slump still beats the staggering outflows of USD 70 billion their conventional equity counterparts endured.

Leaders and Laggards

In the third quarter of 2022, for the first time, nine out of the 10 best-selling sustainable funds were passive strategies, netting USD 11.5 billion collectively. **IShares MSCI USA ESG Enhanced ETF** topped the leaderboard with its stellar inflow of USD 5.3 billion alone. The fund tracks a climate transition benchmark that, through an optimizer, also maximizes exposure to issuers with higher ESG ratings.

Exhibit 8a Top 10 Sustainable Fund Flows in 03 2022

Fund Name	Net Flows (USD, Million)
iShares MSCI USA ESG Enhanced ETF	5,274
Xtrackers II ESG EUR Corporate Bond ETF	1,069
Xtrackers MSCI USA ESG ETF	995
Mercer Passive Global High Yield Bond Fund	866
iShares MSCI EM ESG Enhanced ETF	822
iShares € Corp Bond ESG ETF	815
JPMorgan ETFs (Ireland) ICAV - US Research Enhanced Index Equity (ESG) ETF	602
UBS (CH) Investment Fund - Equities Switzerland ESG Passive All II	554
Northern Trust FGR Fund - Emerging Markets Sustainable Select SDG Index	523
iShares € Corp Bond 0-3yr ESG ETF	493

Source: Morningstar Direct, Manager Research. Data as of September 2022.

Passive funds were also represented in the bottom 10 fund flow table below, with three iShares MSCI USA factor ESG ETFs. The minimum-volatility factor typically underperforms in a rising-rate environment, while momentum hasn't been performing well either of late.

Exhibit 8b Bottom 10 Sustainable Fund Flows in 03 2022

Fund Name	Net Flows (USD, Million)
iShares Edge MSCI USA Minimum Volatility ESG ETF	-1,143
UniInstitutional Euro Reserve Plus	-1,078
iShares MSCI USA Momentum Factor ESG ETF	-1,075
iShares MSCI USA Value Factor ESG ETF	-1,040
Mirova Euro Short Term Sustainable Bond Fund	-696
Nordea 1 - Emerging Stars Equity Fund	-576
Multi Manager Access II - European Multi Credit Sustainable	-530
Royal London US Equity Tilt Fund	-412
Veritas Asian Fund	-412
BlackRock Global Funds - Sustainable Energy Fund	-368

Source: Morningstar Direct, Manager Research. Data as of September 2022.

The top 10 best-selling firms saw their aggregated net inflows in the third quarter almost level with the second quarter despite enduring market uncertainty and the growing prospect of economic recession. BlackRock, which routinely tops the leaderboard, registered higher sustainable fund inflows of USD 7.6 billion, helped by the record inflows into **iShares MSCI USA ESG Enhanced ETF** mentioned above. The firm was followed by DWS and Amundi, which recovered from previous business slowdown.

Firm	Net Flows (USD Million)
BlackRock (incl. iShare)	7,635
DWS (incl. Xtrackers)	3,117
Amundi (incl. Lyxor)	2,765
Swisscanto	1,789
BNP Paribas	1,222
КВС	1,034
JPMorgan	855
Robeco	613
Erste	575
Mercer Global Investments	570

Exhibit 9a Top 10 European Sustainable Fund Providers by Flows in Q3 2022

Source: Morningstar Direct, Manager Research. Data as of September 2022.

Union Investment and Royal London topped the ranks of the worst-selling asset managers in the third quarter. The former suffered heavy outflows mostly because of **UniInstitutional Euro Reserve Plus**, which alone bled USD 1.1 billion. Royal London was affected mostly by the outflows from **Royal London U.S. Equity Tilt.** Both funds were among the top 10 European sustainable funds with the largest outflows.

Exhibit 9b Bottom 10 European Sustainable Fund Providers by Flows in 03 2022

Firm	Net Flows (USD Million)
Union Investment	-936
Royal London	-927
Allianz Global Investors	-704
Veritas Asset Management	-539
Pictet	-458
Vontobel	-375
Hermes Fund Managers	-368
Liontrust	-360
Impax	-339
ODDO BHF	-292

Source: Morningstar Direct, Manager Research. Data as of September 2022.

European Sustainable Fund Assets Total USD 1.9 Trillion

Supported by its strong regulatory agenda, and the European Union's Sustainable Financial Disclosure Regulation in particular,³ Europe has seen steady growth in sustainable fund assets over the past couple of years. Yet sustainable fund assets have dwindled this year. As of September 2022, assets in European sustainable funds totaled USD 1.85 trillion, almost level with the restated figure for the second quarter. Assets in the overall European fund universe took a greater hit of almost 10%, which again demonstrated the resilience of European sustainable funds amid a looming economic recession, strong inflationary pressures, interest-rate hikes, and the Russia-Ukraine conflict.

³ For further detail on SFDR's impact on the European ESG fund landscape, read SFDR Article 8 and Article 9 Funds in Review

Overall, sustainable funds still accounted for close to 18% of European fund assets at the end of September 2022, level with the second quarter. We expect this percentage to rise in subsequent quarters as investors' demand for strategies that align with their sustainability preferences continues to grow, prompting asset managers to launch additional sustainable products and repurpose existing conventional ones. The MiFID II amendment, which came into effect in August and which requires financial advisers to consider their clients' sustainability preferences, has the potential to accelerate adoption of sustainable investments among retail investors despite macro headwinds.

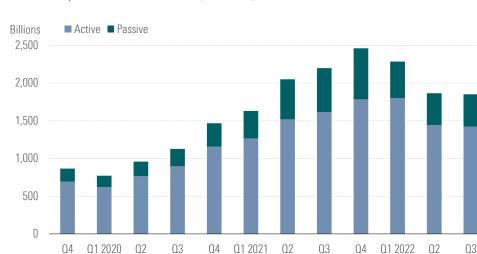


Exhibit 10 European Sustainable Fund Assets (USD Billion)

Source: Morningstar Direct, Manager Research. Data as of September 2022. Data for Q1 and Q2 was retreated using the new framework for ease of comparison. Under the old framework, assets in Q1 and Q2 were USD 2.33 trillion and USD 2.03 trillion, respectively.

Launches

Product development slowed significantly in the third quarter. We have so far identified 82 new sustainable funds that hit the shelves over the past three months, almost half the second quarter's readjusted number of 161. (Please note that this quarter number is also likely to be restated in future reports as we identify more sustainable product inceptions in the third quarter of 2022 and additional ones are reported to Morningstar).

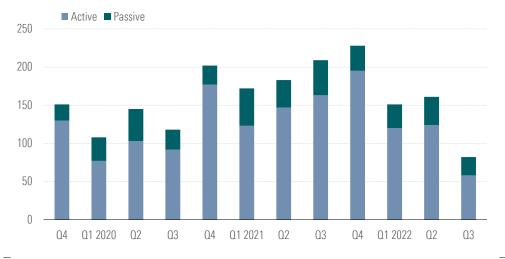
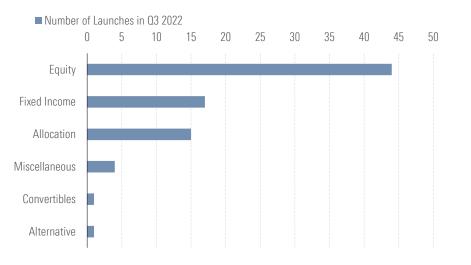


Exhibit 11a European Sustainable Fund Launches

Source: Morningstar Direct, Manager Research. Data for Q1 and Q2 was retreated using the new framework for ease of comparison. Under the old framework, fund launches in Q1 and Q2 were 158 and 168, respectively.

Equity offerings (44) continued to dominate product development activity, thanks to the inception of 21 large-cap funds, making up over one fourth of the total sustainable fund launches in the past three months.





Source: Morningstar Research. Data as of September 2022.

While general ESG-focused offerings continued to account for the majority of product development, climate funds remained by far the most popular theme represented among new product launches. About 30 funds with a climate flavor came to market, spanning all climate investment approaches. Climate-themed funds allow investors to reduce climate risk in portfolios and/or gain exposure to companies that will benefit from, or contribute to, the transition to a low-carbon economy. Nine were Paris-aligned passive strategies, including Northern Trust World Natural Capital PAB Index Fund II, Ossiam

Bloomberg USA PAB ETF, SPDR MSCI Emerging Markets Climate Paris Aligned ETF, and Xtrackers Europe Net Zero Pathway Paris Aligned ETF.

Other sustainable products target a variety of environmental and social issues including biodiversity, healthy ecosystem, food security, and healthcare. For example, AXA launched **AXA Biodiversity Equity**. This SDG-aligned strategy primarily focuses on companies offering solutions that address biodiversity loss, such as pollution on land and water, land degradation, fauna and flora protection, desertification, and overconsumption. The fund seeks to invest in companies across all sectors that support the targeted SDGs through the quality of their operations while minimizing negative biodiversity externalities.

Another example is **Lombard Odier New Food Systems**. The fund aims to invest in 35 to 50 companies associated with the transition to more-sustainable food systems. Key themes include sustainable food production, enabling solutions, and sustainable food consumption.

Regulatory Updates

The European Supervisory Authorities delivered their Final Report and draft Regulatory Technical Standards to the European Commission regarding the disclosure of financial products' exposure to investments in fossil gas and nuclear energy activities under the Sustainable Finance Disclosure Regulation, or SFDR. Specifically, the disclosures add a yes/no question to the financial product templates of the SFDR Delegated Regulation to identify whether the financial product intends to invest in such activities. If the answer is yes, a graphical representation of the proportion of investments in such activities would be required.

The EC published a FAQ document to clarify the Article 8 Taxonomy Regulation Disclosures Delegated Act reporting requirements of eligible economic activities and assets.

MiFID amendments took effect on 2 Aug with respect to assessing clients' sustainability preferences as part of the investment advice process. In late September, the European Securities and Markets Authority published its final report on guidelines on certain aspects of the MiFID II suitability requirements, which will take effect six months after the translated guidelines are published on the ESMA website. The guidelines cover the information to be provided to clients about sustainability preferences and collection and assessment of information from clients on sustainability preferences, as well as the organizational requirements that firms must consider around staff training and recordkeeping.

ESMA also published its five-year strategy and re-emphasized intent to embed sustainability in all its activities and support the transition to a more sustainable economic and financial system, calling out integrity of ESG information, an improved ESG regulatory framework and supervision, and a recognition of the role of retail investors in financing the transition to a greener economy.

The EU Platform on Sustainable Finance published its final report on the functioning of the Minimum Safeguards laid out in the EU Taxonomy Regulation. The Minimum Safeguards ensure that companies

engaging in sustainable activities meet certain standards when it comes to human and labor rights, bribery, taxation, and fair competition.

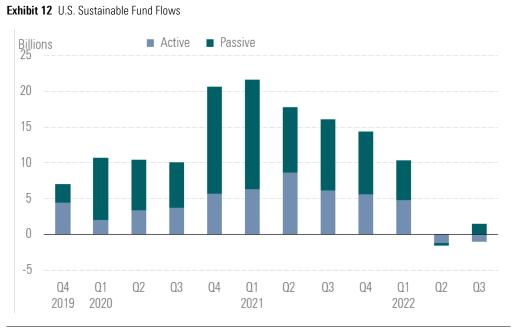
Version 1.1 of the industry European ESG Template, or EET, was released for consultation, focused on addressing information required under the SFDR and Taxonomy Regulatory Technical Standards from 1 Jan 2023, covering precontractual and periodic reporting as well as entity-level principal adverse impact reporting.

For further detail on the impact of SFDR on the European ESG fund landscape, read SFDR Article 8 and Article 9 Funds in Review.

United States

U.S. sustainable funds snuck back into positive territory, netting a modest USD 459 million during 2022's third quarter. This comes on the heels of the first quarter of outflows in more than five years, weighed down by fears of recession, inflation, rising interest rates, and a global energy crisis.

Once Again, Sustainable Funds Fared Better Than Nonsustainable Peers Though down from the all-time record USD 21.6 billion intake in 2021's first quarter, flows into sustainable funds are back in positive territory. This was a notable departure from the total universe of U.S. open-end funds and ETFs, which bled USD 86 billion during the quarter.



Source: Morningstar Direct, Manager Research. Data as of September 2022. Data for Q1 and Q2 was retreated using the new framework for ease of comparison. Under the old framework, flows in Q1 and Q2 were USD 10.6 billion and -1.6 billion, respectively.

Solar Energy Lit Up the Room

Sustainable index-based funds bounced back into positive territory, netting USD 1.5 billion during the period. This is a brighter picture than their second-quarter outflows but still well below their average quarterly intake of USD 8 billion over the past three years.

Clean energy/tech funds, which investors fled in the second quarter, were among the top flow-getters in 2022's third quarter. For example, **Invesco Solar ETF**, which shed USD 190 million during the second quarter, more than made up its losses with USD 223 million in inflows during the third quarter. Earlier this year, renewable energy funds were pummeled by all-time record-high gasoline prices in the U.S. Although the volatility in energy markets continues, inflows indicate investor optimism for these funds.

Investor demand for sustainable passive funds offset withdrawals from sustainable active funds, which lost more than USD 1 billion during the third quarter. Actively managed sustainable funds have endured a rough 2022, suffering outflows in four out of nine months so far. However, this pales in comparison to nonsustainable active funds, which have lost roughly USD 67 billion each month (on average) so far this year.

Are Investors Buying the Dip?

Most of the funds with the strongest third-quarter inflows are core portfolio holdings. Six of the 10 funds provide diversified exposure to large-cap stocks, and three funds target broad swaths of the bond market: **iShares ESG U.S. Aggregate Bond ETF, Calvert Bond**, and **iShares ESG Corporate Bond ETF**. Given recent turbulence in equity and bond markets, investors may be rebalancing portfolios to prepare for whatever comes next.

Exhibit 13a Top 10 Sustainable Fund Flows in 03 2022

Fund Name	Net Flows (USD Million)
Brown Advisory Sustainable Growth	376
Invesco Solar ETF	223
Calvert Equity	210
iShares ESG U.S. Aggregate Bond ETF	193
TIAA-CREF Social Choice International Equity	113
Nuveen ESG Large-Cap Value ETF	102
Vanguard ESG US Stock ETF	92
Pax International Sustainable Economy	86
Calvert Bond	84
iShares ESG USD Corporate Bond ETF	72

Source: Morningstar Direct, Manager Research. Data as of September 2022.

Floating-Rate Bond Funds Sunk to the Bottom in Terms of Outflows

The second-biggest loser for the quarter was **Invesco Floating Rate ESG**, which bled USD 298 million during the quarter. Notably, this fund was the top flow-getter among sustainable funds during the first half of 2022 and for all of 2021. Investors commonly use floating-rate bonds as a hedge against rising interest rates, and the fund has provided some relief given this backdrop. During the first nine months of

2022, the fund lost 4.5%, offering better ballast than the Morningstar US Core Bond Index, which lost 14.6% during the period. However, the fund's loss beat only half of its peers in the bank-loan Morningstar Category and trailed its category benchmark (the Morningstar LSTA US Leveraged Loan Index) by roughly 130 basis points.

Exhibit 13b Bottom 10 Sustainable Fund Flows in 03 2022

Name	Net Flows (USD Million)	
Parnassus Core Equity	-464	
Invesco Floating Rate ESG	-298	
Calvert Emerging Markets Equity	-236	
TIAA-CREF Social Choice Equity	-170	
Domini Impact International Equity	-152	
Calvert Short Duration Income	-137	
American Century Sustainable Equity	-104	
Parnassus Mid-Cap	-96	
TIAA-CREF Core Impact Bond	-92	
Virtus Duff & Phelps Water	-90	

Source: Morningstar Direct, Manager Research. Data as of September 2022.

Rising Interest Rates Spooked Bond Investors

Flows into sustainable fixed-income funds were on a steady upward trajectory until the Federal Reserve started raising rates in early 2022. During the third quarter, sustainable bond funds lost USD 27 million, their first quarter of outflows in more than three years. This paled in comparison with nonsustainable taxable-bond and municipal-bond funds, which surrendered USD 44 billion during the quarter.

Exhibit 14 U.S. Sustainable Fund Flows by Asset Class



Source: Morningstar Direct, Manager Research. Data as of September 2022. Data for Q1 and Q2 was retreated using the new framework for ease of comparison. Under the old framework, flows in Q1 and Q2 were USD 10.6 billion and USD -1.6 billion, respectively.

Outflows in September weren't enough to keep sustainable equity funds down. During the third quarter, these funds netted USD 525 million, led by a mix of large-cap domestic and international equity funds. This was their second-weakest quarter in more than three years, reflecting volatility and uncertainty in global markets, but they still held up better than nonsustainable equity peers, which bled USD 25 billion during the period.

Assets in U.S. Sustainable Funds Dipped to the Lowest Level Since Early 2021 Together with market depreciation, tepid demand for sustainable funds drove assets in these funds to USD 272 billion, their lowest point since the first quarter of 2021. This represents a 24% decline from the all-time record of USD 358 billion at the end of 2021. By comparison, assets in the broader U.S. market also peaked at the end of 2021 (at USD 28 trillion) and slid by 23% to USD 21.5 trillion at the end of 2022's third quarter.

Still, the U.S. sustainable funds landscape maintained a higher organic growth rate than the total U.S. fund universe. Calculated as net flows relative to total assets at the start of a period, an organic growth rate of 1% is fairly common, and it becomes more meaningful over longer periods of time. So far in 2022, sustainable funds grew by 2.6%, while the broader universe shrunk by 0.71%. This continued growth even during a period of poor performance could signal that investor demand for sustainable funds is more "sticky" than broader U.S. demand.

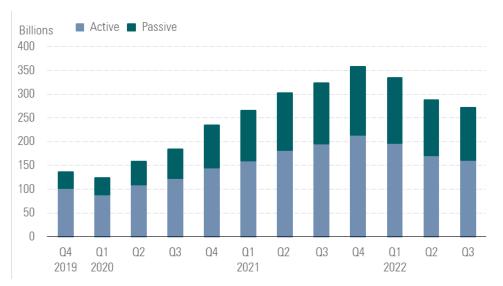


Exhibit 15 U.S. Sustainable Fund Assets

Source: Morningstar Direct, Manager Research. Data as of September 2022. Data for Q1 and Q2 was retreated using the new framework for ease of comparison. Under the old framework, assets in Q1 and Q2 were USD 344 billion and 296 billion, respectively.

Active Funds Dominated New Launches Once Again

Despite increasing investor preference for passive funds, all but one of the 15 sustainable funds launched in the U.S. during 2022's third quarter are actively managed. On average over the past three

years, active funds have accounted for 73% of sustainable fund launches, and this quarter's 93% exceeded that trend.





Source: Morningstar Direct, Manager Research. Data as of September 2022.

The single new passive offering is **Harbor Energy Transition Strategy ETF**, an index-based commodities strategy launched in July. The index is composed of futures contracts on physical commodities such as copper, aluminum, nickel, zinc, and platinum, which are associated with the transition to renewable energy sources.

New Sustainable Funds Focused on Impact Themes

The largest new U.S. sustainable fund was **AXS Green Alpha ETF**, the third sustainable offering from alternatives-focused AXS Investments. The actively managed equity fund targets four pillars of sustainability: renewable energy, wealth distribution, economic "dematerialization" (or increasing the level of economic output from shrinking quantities of inputs), and life cycle supply chain management (reusing functional materials to reduce the strain on geological resources).

		Fund AUM (USD
Name	Inception Date	Million)
AXS Green Alpha ETF	9/27/2022	26
Harbor Energy Transition Strategy ETF	7/13/2022	22
JPMorgan Sustainable Consumption ETF	9/7/2022	10
JPMorgan Sustainable Infrastructure ETF	9/7/2022	9
Principal Global Sustainable Listed Infrastructure	9/23/2022	9
JPMorgan Social Advancement ETF	9/7/2022	9
Carbon Collective Climate Solutions US Equity ETF	9/19/2022	5
Morgan Stanley Sustainable Emerging Markets	9/30/2022	5
Newday Sustainable Development Equity ETF	9/12/2022	1
Emerge EMPWR Unified Sustainable Equity ETF	9/8/2022	0

Exhibit 17 Largest New U.S. Sustainable Funds Launched in the Second Quarter

Source: Morningstar Direct, Manager Research. Data as of September 2022.

Firms Continued to Repurpose Funds for Sustainable Outcomes

Most of the new options available to U.S. investors were launched with sustainable mandates, but firms also occasionally change the investment strategies of existing funds to target sustainable outcomes. Four funds were repurposed to adopt sustainable mandates in the third quarter of 2022.

The largest of these was **Delaware Climate Solutions**, with USD 232 million in assets. The fund was previously named Delaware Ivy Energy and invested in companies involved in exploration, production, distribution, or infrastructure related to energy (and/or alternative energy) sources. The fund's updated focus is on firms involved in reducing and/or sequestering greenhouse gas emissions. It still holds traditional energy companies but prefers those that demonstrate a commitment to decarbonization in line with the Paris Agreement.

The new offerings and repurposed funds brought the total number of sustainable open-end funds and ETFs in the U.S. to 580 at the end of the quarter.

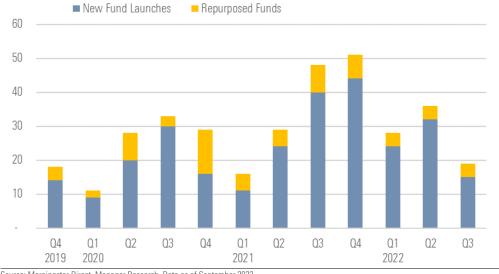


Exhibit 18 New and Repurposed Sustainable Funds

Source: Morningstar Direct, Manager Research. Data as of September 2022.

One Firm No Longer Draws Inspiration From ESG Investing

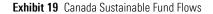
During the third quarter, eight funds from Inspire renounced sustainable investing mandates. As such, they were removed from our sustainable funds universe. The announcement came in August, even though two of these funds—Inspire 100 ETF and Inspire Global Hope ETF—adopted sustainable mandates only in March of this year.

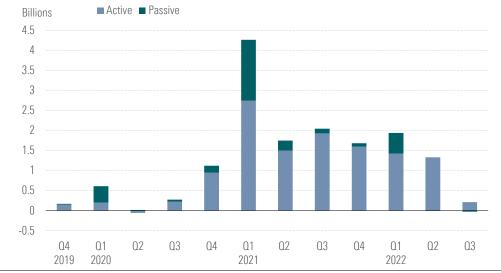
In his statement, Inspire's CEO claims that ESG investing "has become weaponized" by the political left, apparently the firm's key rationale for abandoning the investment strategy. This follows an emerging trend among politicians in the U.S. who take issue with ESG investing, which other asset managers have capitalized upon by launching so-called anti-ESG funds. We don't systematically track these strategies, but the developments are attracting a lot of noise leading up to the 2022 midterm elections in the U.S.

Canada

Flows

Net flows into Canadian-domiciled sustainable funds and ETFs declined but were still positive, at roughly USD 184 million, compared with the restated USD 1.3 billion in the second quarter of 2022. This level of inflows was last seen in the third quarter of 2020. Active strategies contributed positively to the inflows, while passive strategies registered small outflows.

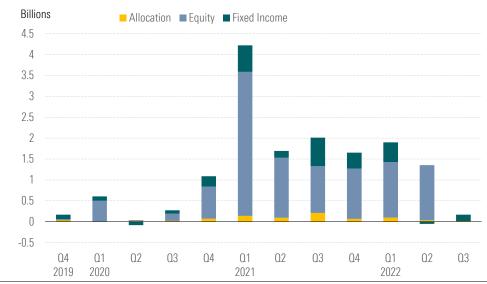




Source: Morningstar Direct, Manager Research. Data as of September 2022.

Fixed-income offerings experienced the strongest inflows over equities for the first time. Flows into equities had always been in favor, largely because of the greater number of actively managed products available to investors.





Source: Morningstar Direct, Manager Research. Data as of September 2022.

The top 10 funds by estimated net inflows saw close to USD 403 million during the third quarter, with **Invesco ESG Global Bond ETF** experiencing the largest positive inflows. While 64% of the flows were

attributed at the beginning of the quarter, a handful of funds saw relatively large flows toward the end, notably **Desjardins SociaTerra Canadian Bond** and **NBI Sustainable Canadian Equity**.

Assets

A lack of appetite for new funds and an overall market decline resulted in flat growth in sustainable fund assets for the third quarter. Assets stood at USD 25.3 billion at the end of September, representing a drop of 5.5% from a revised USD 26.8 billion in June. Assets in actively managed funds decreased by 5% over the quarter, while passively managed funds fell by 8%.

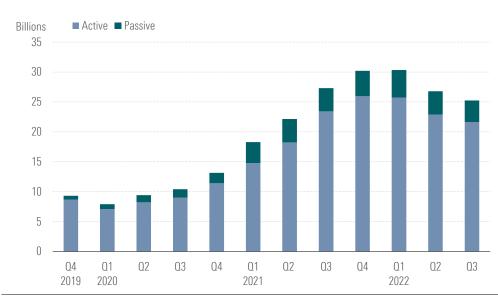


Exhibit 21 Canada Sustainable Fund Assets

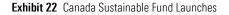
Source: Morningstar Direct, Manager Research. Data as of September 2022.

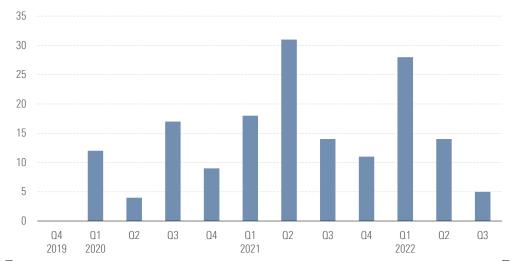
The third quarter experienced a shift away from equities to fixed income, although equities still hold the lead. At the end of September, equities represented 68% of all sustainable fund assets, followed by fixed income (26%), and the remainder to allocation and alternative funds.

The top 10 asset managers dominating the sustainable fund universe largely remained the same, the top of which are NEI Investments, Desjardins, Mackenzie, BMO, National Bank (Canada), RBC, IA Clarington, Franklin Templeton, AGF Investments, and Fidelity. Together, these 10 providers manage 91% (a 3% increase from last quarter) of sustainable fund and ETF assets in Canada. We would be remiss not to highlight Desjardins's jump from fifth to second place, or 9% to 21% market share.

New Launches

Product development in the sustainable fund and ETF space declined for the second time in a row in Canada. There were five new launches for the third quarter of 2022, representing a significant drop relative to the second quarter (13) and the first quarter (28). The last time sustainable products saw such a muted launch activity was nearly two years ago, in the fourth quarter of 2020.





Source: Morningstar Direct, Manager Research. Data as of September 2022.

Product launches for the third quarter were dominated by Canada Life in fund size with its two new sustainable funds, which totaled USD 47.9 million, representing 99% of new products launched. A single asset manager also dominated last quarter: Desjardins. It collected 7 times this quarter's fund size.

Australia and New Zealand

Flows

The Australasian (Australia and New Zealand) sustainable funds universe inflows continued to be muted in the third quarter when compared with 2021 yet remained net positive with USD 445 million of inflows over the past three months. For context, 2021 was an extraordinarily year for inflows, with record sustainable fund flows.

The third quarter saw the bulk of flows swing back into active strategies, which accounted for close to 70% of all flows (USD 308 million), a reversal of the significant flow of 85% to passive strategies we observed in the second quarter. Australian Ethical led sustainable flows in the third quarter, overtaking Vanguard Investments Australia in the previous quarter.

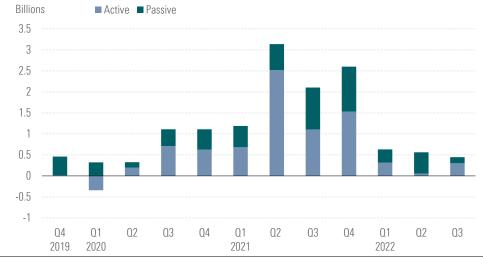
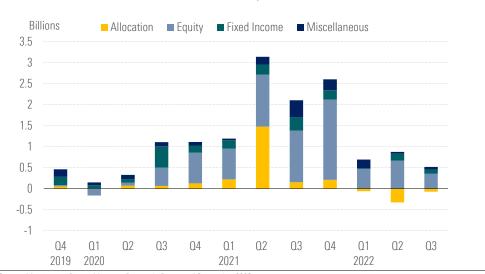


Exhibit 23 Australia and New Zealand Sustainable Fund Flows

Source: Morningstar Direct, Manager Research. Data as of September 2022.

Flows by Category

In keeping with the last four quarters, equity managers captured the majority of third-quarter flows, with USD 351 million invested. Positive net flows were also captured by fixed-income and miscellaneous categories. Allocation strategies saw outflows of USD 73 million.





Source: Morningstar Direct, Manager Research. Data as of September 2022.

Assets

Assets in Australasian sustainable funds declined in the third quarter; however, this is driven by market movements, as net flows remained positive. The total size of Australasian sustainable investments was USD 23.1 billion at the end of September, down from the previous quarter's total of USD 25.3 billion,

equating to an 8.9% decrease. In light of heightened market volatility, particularly in domestic and international equity returns, this is not surprising. The Australian sustainable funds market remains quite concentrated, with the top 10 funds accounting for 69% of total assets in the sustainable fund universe.

The top five fund houses by sustainable fund assets are Australian Ethical (15.7%), Vanguard Investments Australia (12.5%), DFA Australia (10.5%), BetaShares (10.1%), and Pendal (5.5%).

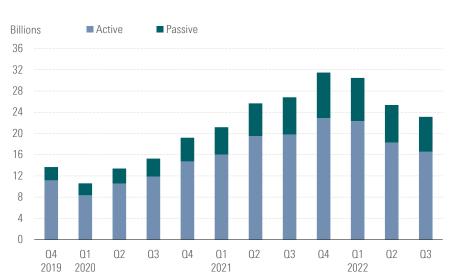


Exhibit 25 Australia and New Zealand Sustainable Fund Assets

Source: Morningstar Direct, Manager Research. Data as of September 2022.

Launches

There were six new sustainable funds launched in the third quarter of 2022, including three active strategies: **Stewart Global Investors Worldwide Leaders Sustainability, CFS Thrive + Sustainable Growth**, and **Mivoa Global Sustainable Equity No. 21**. The remaining strategies are three iShares ETFs: **iShares High Growth ESG ETF**, **iShares Balanced ESG ETF**, and **iShares Global Aggregate Bond ESG AUD Hedged ETF**. The quarter prior saw seven funds launched, five active and two passive. We are consistently seeing new sustainable strategies come to market, and these launches are skewed to active approaches.

The sustainable funds universe does not contain the growing number of Australasian funds that now formally consider ESG factors in a nondeterminative way in their security selection (commonly known as ESG-integrated funds).

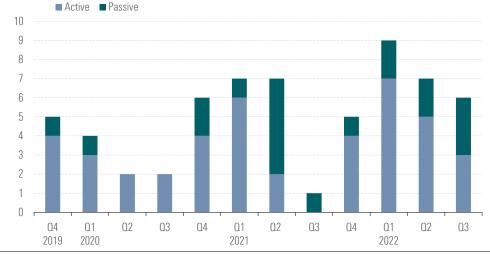


Exhibit 26 Australia and New Zealand Sustainable Fund Launches

Source: Morningstar Direct, Manager Research. Data as of September 2022.

With the six new strategies launched in the third quarter, we count 192 strategies in our Australasian sustainable fund universe.

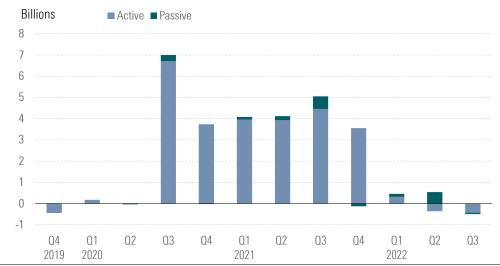
Japan

Flows

In the third quarter of 2022, the Japanese sustainable fund market recorded net outflows for the first time in more than two years (since the second quarter of 2020). Net outflows amounted to USD 493 million.

In Japan, newly launched funds tend to drive inflows, but within two years, investors take their money out. Sustainable funds were no exception to this trend. Newly incepted funds drove inflows in the quarter, with all six new funds featuring in the top 10 in terms of inflows. However, these inflows were not large enough to offset the older funds' outflows. All top 10 funds in terms of outflows were launched between July 2020 and July 2021, which in aggregate bled USD 607 million. Nine of these funds are actively managed equity funds, which mostly explains the active-passive and asset-class split of the flows in the two exhibits below.

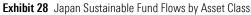




Source: Morningstar Direct, Manager Research. Data as of September 2022.

It should be noted that there is a possibility of double-counting at the global level. We include Japandomiciled funds of funds and feeder funds in this review to better reflect the actual flow situation in the Japanese fund market, as many Japanese funds of funds are invested in European funds.

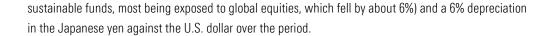


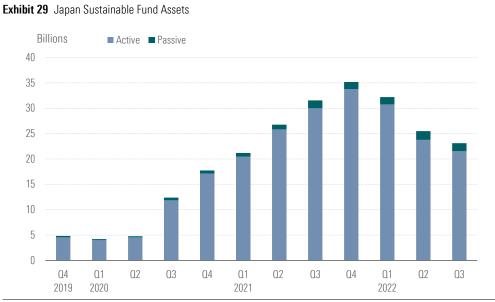


Assets

Total assets in Japan-domiciled sustainable funds continued their decline in the third quarter, falling 9% to USD 23 billion at the end of September 2022. In addition to the outflows mentioned earlier, two other factors contributed to this decline: lower stock prices (equity funds constitute 95% of Japan-domiciled

Source: Morningstar Direct, Manager Research. Data as of September 2022.





Source: Morningstar Direct, Manager Research. Data as of September 2022.

Launches

Six new sustainable funds came to the Japanese market in third quarter 2022, a decrease compared with the 13 new funds in the previous quarter. All new products are actively managed. Four were launched as part of a fund series called "Nomura Sustainable Select" launched by Nomura Asset Management. Two invest in global equities, and the other two are balanced strategies that invest in both global equities and corporate bonds. There are currency-hedged and unhedged versions for each equity and balanced funds. ESG factors are considered in the security-selection process. Net inflows into newly launched funds in the quarter were USD 322 million in total, of which USD 209 million came from four Nomura funds.

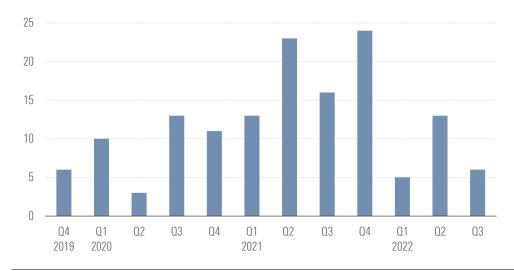


Exhibit 30 Japan Sustainable Fund Launches

Source: Morningstar Direct, Manager Research. Data as of September 2022.

Asia ex Japan

For funds of which full quarterly data was unavailable at the time of publication, we used the mostrecent data available within the past quarter. Since China's data was not available at the time of publication, we used second-quarter 2022 data as a proxy for third-quarter 2022 data.

Flows

Excluding China, the Asia ex Japan region recorded net inflows of nearly USD 600 million into sustainable funds during the third quarter of 2022. This is lower than the USD 1,299 million in net inflows in the second quarter of 2022.

Sustainable fund flows in Taiwan continued to be the highest in the region, reaching USD 856 million over the third quarter. Singapore recorded negligible inflows of USD 0.72 million of inflows, while flows in Thailand increased from USD 0.83 million to USD 5 million. By contrast, India and Hong Kong experienced net outflows of USD 59 million and USD 24 million, respectively, over the quarter.

South Korea saw USD 177 million in net outflows, the largest in the region and a continuation of last quarter's outflows. Equity funds, such as **TIGER Innovator ESG30** and **ARIRANG ESG Value Active**, accounted for USD 85 million of the outflows. Fixed-income funds, such as **KIM Credit Focus Feeder ESG Bond** and **Midas Prestige SRI Bond**, saw USD 73 million in outflows.

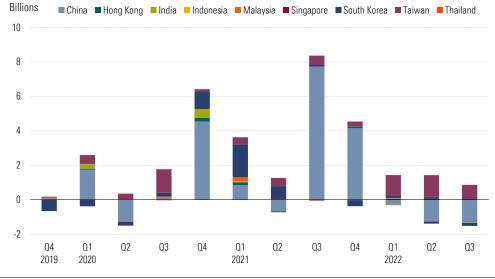


Exhibit 31 Asia ex Japan Sustainable Fund Flows (USD Billion)

Source: Morningstar Direct, Manager Research. Data as of September 2022.

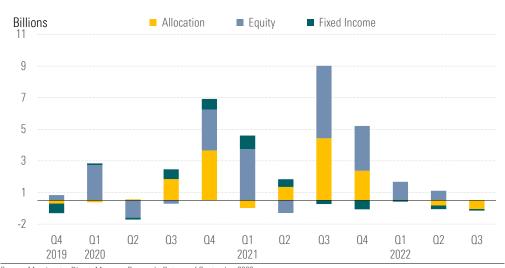


Exhibit 32 Asia ex Japan Sustainable Fund Flows by Asset Class (USD Billion)

Source: Morningstar Direct, Manager Research. Data as of September 2022.

Assets

Total assets in Asia ex Japan sustainable funds were roughly flat at the end of September 2022, at USD 49 billion, registering an increase of just 0.8% quarter-over-quarter. Outside of China (for which data was not available at the time of publication), Taiwan and South Korea remained the two largest markets by asset size, accounting for 14.6% and 6.9% of the region's assets, respectively. However, South Korea's sustainable fund assets continued to fall from last quarter, dropping 16.4% from last quarter and 31.2% from the first quarter.

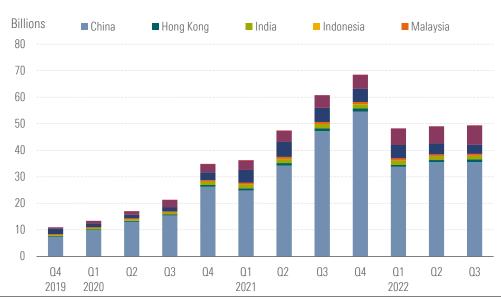


Exhibit 33 Asia ex Japan Sustainable Fund Assets (USD Billion)

Source: Morningstar Direct, Manager Research. Data as of September 2022.

Following a quarter-over-quarter decline of 9.3% in assets, fixed income represented 5.4% of Asia ex Japan sustainable fund assets at the end of September, while equity continued to make up the bulk of the assets (60%) and allocation funds accounted for the remaining 34.7%. Meanwhile, passive funds accounted for 19.0% of Asia ex Japan sustainable fund assets, a slight decrease from 18.1% in second-quarter 2022.

Launches

Product development was strong in the third quarter. There were 34 new sustainable fund launches in Asia ex Japan, including 24 in China, six in South Korea, three in Taiwan, and one in Malaysia. Equity funds continued to dominate with 20 launches, while allocation and fixed-income funds made up the remaining nine and five, respectively. All 10 new passive funds were launched in China, eight of which are the first batch of ETFs tracking the CSI Shanghai Environment Energy Exchange Carbon Neutral Index. Offered by different asset managers, these ETFs, which include **E Fund Carbon Neutral 100 ETF** and **ICBCCS CSI SEEE Carbon Neutral ETF**, invest in leading companies that have made significant contributions to carbon neutrality targets. The remaining two passive funds incepted in the third quarter were **Guotai MSCI China A ESG Universal ETF** and **Fullgoal CSI 500 ESG ETF**.

Of the launches with fund size data available, the Taiwan-domiciled **SinoPac ESG Global Digital Infrastructure** was the largest, amassing more than USD 108 million in assets by the end of September 2022. Other launches in the region included the South Korea-domiciled **Samsung KODEX ESG Korea Total Bond Market A- Active ETF** and the **Malaysia-domiciled Public e-Wholesale Sustainable 20**.

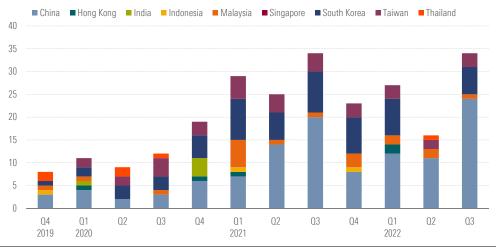


Exhibit 34 Asia ex Japan Sustainable Fund Launches

Source: Morningstar Direct, Manager Research. Data as of September 2022.

Regulatory Updates

Regulatory institutions across the Asia ex Japan region continued to implement ESG considerations in their directives.

In July 2022, the Shenzhen Exchange launched a slew of new ESG indexes based on the CNI ESG Ratings Methodology, a new initiative with index ratings based on objective rules and public information.

In Hong Kong, the Securities and Futures Commission outlined next steps for its agenda for green and sustainable finance, which focuses on three key areas: corporate disclosures, monitoring of the implementation of and enhancing existing measures, and identifying an appropriate regulatory framework for any proposed carbon markets.

Taiwan's Financial Supervisory Commission, meanwhile, amended prospectus requirements to enable securities investment trust funds to label themselves as ESG-themed funds, specifying disclosure requirements.

Elsewhere, South Korea's Financial Services Commission launched a financial regulatory reform composed of 17 private sector participants that will be used to push forward regulatory reform initiatives.

Singapore has seen multiple new ESG initiatives. The Monetary Authority of Singapore and the Singapore Exchange partnered to launch a digital disclosure portal for ESG data, and the Monetary Authority of Singapore issued new disclosure and reporting guidelines for retail funds with ESG labels in July 2022 that will take effect starting 1 Jan 2023. The guidelines will focus on fund managers' disclosure of criteria and metrics used to select investments and risks associated.

Appendix – Defining the Global Sustainable Fund Universe

The global sustainable fund universe encompasses open-end funds and ETFs that, by prospectus or other regulatory filings, claim to use environmental, social, or governance factors as a central focus of their investment process.

Morningstar's universe of sustainable funds is based on intentionality rather than holdings. As such, our definition of sustainable investment differs from the definition under the EU's Sustainable Finance Disclosure Regulation, which defines "sustainable investments" at a holding level.

For this report, to identify sustainable funds in their respective regions, manager research analysts⁴ used the "Sustainable Investment–Overall" data point, which is part of the Sustainable Attributes framework in Morningstar Direct. In August 2022, Morningstar enhanced this framework to better reflect the evolution of the sustainable investment industry, latest regulatory developments, and investors' expectations.

Following the migration to the new Sustainable Attributes framework, funds previously tagged as "Sustainable Investment–Overall" in Morningstar Direct that don't meet the new framework's criteria have been untagged, and these changes have been reflected in this report. We have, for example, removed from our global sustainable fund universe many funds that just employ exclusionary screens as exclusions are not deemed sufficient to make an investment product a sustainable investment.⁵

Given its size and the diversity of strategies it houses, Europe was the region most affected by the change in framework. In the second quarter, we reported that the European sustainable fund universe consisted of 5,112 products at the end of June. Following the migration, we removed from this universe about 600 funds that were no longer tagged as sustainable in Morningstar Direct and added more than 600 funds that were tagged (including new fund launches or funds repurposed in the third quarter). These changes resulted in a new European universe of 5,156 sustainable funds at the end of September. Other regions were much less affected by the change in framework. For example, in the U.S., fewer than 25 funds were removed from the second-quarter sustainable fund universe.

⁴ In Europe, manager research analysts previously used natural-language-processing technology to identify sustainable investments and build their universe of sustainable funds. As a result, the European sustainable fund universe as reported in previous reports differed from the universe of European funds tagged as sustainable in the Morningstar Direct database. This is no longer the case.

⁵ Exclusions are identified separately and tagged under the "Employ Exclusions Attributes" framework.

For ease of comparison with previous quarters, in this report, we have adjusted every regional universe and the related data for the first and second quarters, as done in previous reports when fund universes changed.

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