TwentyFour
a boutique of Vontobel

TwentyFour Asset Management LLP

UK TCFD report TwentyFour Asset Backed Income Fund Summary

Year ending 31st December 2023

Asset Class Coverage

This investment portfolio had exposure only to fixed income securities and derivatives as at the reporting date 31 December 2023.

The asset classes that have been included in our analysis are:

- Corporate bonds/issuers
- Asset-backed securities
- Sovereign issuers of government bonds

The breakdown of the Fund's assets under management as at 31 December 2023 was as follows:

Asset Class	Asset Class
Corporate Bonds	0%
Asset-backed Securities	93%
Sovereign Bonds	0%
Fixed income funds	4%
Cash & Equivalents	3%

Derivatives not linked to corporate issuers are excluded from our reporting. The only derivatives held as at 31 December 2023 were FX forwards used for currency hedging and their market value is included within the cash & equivalents figure.

Where relevant, coverage of each asset class has been included alongside the reporting metrics. Due to fundamental differences between the metrics reported and obtained for corporate bond issuers and asset backed securities versus sovereign issuers of government bonds, sovereign debt securities are reported separately.

Scope 1, Scope 2 Greenhouse Gas (GHG) Emissions, and the Related Risks

Subject to available data we have disclosed Scope 1 and Scope 2 emissions associated with the investment portfolio's assets under management by asset class.

2024 (Base Year) Carbon Footprint

	ABS	Fixed income funds	Total
Carbon Footprint (tCO_2e/$m invested)	34.8	37.9	35.1
Asset Class Coverage	50%	100%	52%

The Carbon Footprint figures above are expressed as tons of CO_2e (tCO_2e) per million dollars of AUM invested. Total fund coverage is 51%. Sources: Asset4, MSCI & TwentyFour, as at 31 December 2023.

Carbon footprint measures the carbon emissions (Scope 1 and Scope 2), for which an investor is responsible, per USD million invested, based on ownership. Emissions are apportioned differently by asset class (also see Methodologies and Glossary).

For corporate bond issuers, TwentyFour has used Enterprise Value Including Cash (EVIC) to calculate ownership. As EVIC is not applicable to asset backed securities, the total outstanding deal balance for each security is used and is deemed a comparable metric, which is also why carbon footprint is reported separately between asset classes.

Financed Carbon Emissions

	ABS	Fixed income funds	Corporates + ABS
Scope 1+2 Emissions (tCO_2e)	5,410	328	5,738
Asset Class Coverage	50%	100%	52%

Total Fund coverage is 51%. Sources: Asset4, MSCI & TwentyFour, as at 31 December 2023.

Absolute emissions shown are the sum of Scope 1 and Scope 2 emissions based on ownership. Scope 1 and Scope 2 emissions may be reported or estimated. The absolute emissions only represent those for the covered companies and securities.

WACI: "For asset-backed securities, as sales revenue is not applicable for this asset class, and alternative methodologies have not been established for this asset class, TwentyFour does not calculate a value."

CVaR: "For asset-backed securities, as there is insufficient coverage within MSCI for this asset class, TwentyFour is unable to provide CVaR scenario analysis."

Appendix

Methodologies and Glossary

Terms	Additional Information
Asset 4	Refinitiv Asset4
Carbon Footprint	Refers to total carbon emissions for a portfolio normalised by the market value of the portfolio, expressed in tons CO_2e/$M invested. $$\frac{\sum_{n}^{i}\left(\frac{\textit{Current Value of Investment}}{\textit{Issuer's Market Capitalisation}}\ \textit{X Issuer's Scope 1 and Scope 2 GHG Emissions}\right)}{\textit{Current Portfolio Value (\$M)}}$$ For asset-backed securities, the issue size is used in place of issuer's market capitalisation.
Climate Value-at-Risk (CVaR)	For CvaR three scenarios are shown: • Orderly transition - assumes climate policies are introduced early and become gradually more stringent. Both physical and transition risks are relatively subdued and is based on a NGFS 1.5 °C warming scenario • Disorderly transition - assumes higher transition risk due to policies being delayed or divergent across countries and sectors. Carbon prices are typically higher for a given temperature outcome and is based on a NGFS 2°C warming scenario • Hothouse world - assumes that some climate policies are implemented in some jurisdictions, but global efforts are insufficient to halt significant global warming. Critical temperature thresholds are exceeded, leading to severe physical risks and irreversible impacts like sea-level rise and is based on a NGFS 3 °C warming scenario. Further information on the NGFS and models can be found here: www.ngfs.net/en
Emissions (Non-Sovereign)	Scope 1 emissions are those from sources owned or controlled by the company, typically direct combustion of fuel as in a furnace or vehicle. Scope 2 emissions are those caused by the generation of electricity purchased by the company. For corporate issuers, when Scope 1 and Scope 2 reported data is not available, Scope 1 & 2 carbon emissions may be estimated using MSCI's Scope 1+2 estimation model which is mapped to the data quality score defined by PCAF. Scope 3 emissions are excluded from financed carbon emissions, WACI and carbon footprint figures reported.

Terms	Additional Information
Emissions (Sovereign)	Scope 1 emissions excludes emissions relating to land use, land-use change and forestry (LULUCF) for the country. It also considers CO_2 emissions relating to fossil fuel use and industrial processes (e.g. cement production) (data sources MSCI/EDGAR/World Bank/IMF).
Fugitive Emissions	Refers to unintentional and undesirable emission, leakage, or discharge of gases or vapors from pressure-containing equipment i.e. leaking of refrigerant.
MSCI	MSCI ESG Research LLC
NGFS	The Network of Central Banks and Supervisors for Greening the Financial System is a network of central banks and supervisors, the purpose of which is to help strengthen the global response required to meet the goals of the Paris agreement and to enhance the role of the financial system to manage risks and to mobilize capital for green and low-carbon investments in the broader context of environmentally sustainable development. To this end, the network defines and promotes best practices to be implemented within and outside of the membership of the NGFS and conducts or commissions analytical work on green finance.
Ownership (Corporate Issuers)	TwentyFour have used Enterprise Value Including Cash (EVIC) as an alternate measure to Enterprise Value (EV) to estimate the value of a company by adding back cash and cash equivalents to EV. The EVIC calculation can be summarised as follows: EVIC = Market capitalisation at fiscal year-end date + preferred stock + minority interest + total debt + cash and cash equivalents. The underlying data used for EVIC calculation is sourced from a company's accounting year-end annual filings and is updated and reflected once a year as the data is sourced annually.
PCAF	Partnership for Carbon Accounting Financials
Scope 1 Emissions	Refers to all direct GHG emissions.
Scope 2 Emissions	Refers to indirect GHG emissions from consumption of purchased electricity, heat, or steam.

Terms	Additional Information
Scope 3 Emissions	Refers to other indirect emissions not covered in Scope 2 that occur in the value chain of the reporting company, including both upstream and downstream emissions. Scope 3 emissions could include the extraction and production of purchased materials and fuels, transport-related activities in vehicles not owned or controlled by the reporting entity, electricity-related activities (e.g., transmission and distribution losses), outsourced activities, and waste disposal. For forward-looking metrics, the data models incorporate Scope 3 emissions, however all Scope 3 emissions used are estimated by MSCI's Scope 3 estimation model, due to the current un-usability (inconsistency, volatility) of the reported Scope 3.
Total Carbon Emissions	Refers to the absolute greenhouse gas emissions associated with a portfolio, expressed in tons CO_2e. $$\frac{\sum_{n}^{i}\left(\frac{\textit{Current Value of Investment}}{\textit{Issuer's Market Capitalisation}}\ \textit{X Issuer's Scope 1 and Scope 2 GHG Emissions}\right)}{\textit{Current Portfolio Value (\$M)}}$$
Weighted-Average Carbon Intensity (WACI)	WACI measures the exposure to carbon-intensive companies defined as the weighted-average of each companies' carbon intensity (calculated as Scope1 + Scope 2 emissions, divided by companies' sales, in USD). $$\sum_{n}^{i}\left(\frac{\textit{Current Value of Investment}}{\textit{Issuer's Market Capitalisation}}\ X\ \frac{\textit{Issuer's Scope 1 and Scope 2 GHG Emissions}}{\textit{Issuer's \$M Revenue}}\right)$$

Limitations and Further Disclosures

Limitations

TwentyFour recognises that there are limitations in data sets due to a variety of reasons, and these are outlined below but are not exhaustive:

- All data is based on unaudited figures and may be estimated.
- While many companies disclose the required climate-related risk metrics, others may not do so or are in the early stages of making this available. As a result estimated data may be used which reduces the reliability of the metrics shown.
- Different calculation methodologies are often available for each metric and there can be no guarantee that the methodology chosen is the most appropriate. Any comparison to other external firm's may not be possible or may not be appropriate.
- While the data is shown as at 31 December 2023, the underlying data, including but not limited to Scope 1 and Scope 2 emissions and EVIC, may not be reported as of the same date. Published data also may not be processed and incorporated into third party data models on a timely basis, leading to a misalignment in underlying metrics for a given date.
- All AUM data and product-level security market values are as at 31 December 2023 and exclude advisory assets which TwentyFour do not have discretion over.
- Low coverage of TwentyFour's asset classes will impact the reported metrics and may lead to the figures overestimating or underestimating the actual figures if all data was available and aligned to the reporting date.
- TwentyFour uses carbon emissions, weighted-average carbon intensity and carbon footprint metrics but these are backward looking and only consider historical emissions. Forward-looking metrics (such as Climate Value-at-Risk) are based on proprietary models from a third party which TwentyFour do not independently validate.
- As this is TwentyFour's first TCFD report no prior years' data is reported and therefore no comparative analysis has been performed.

TwentyFour uses two third party data providers to supplement ESG data that is sourced internally by the portfolio management teams, namely MSCI and ASSET4.

Disclosures

Metrics included in this report or similar instances are based on recommendations from the TCFD and similar voluntary frameworks, recommendations or proposals developed by various initiatives. This inherently involves methodologies and data that are at various degrees of development, quality and acceptance, notably as it relates to greenhouse gas emissions accounting, asset classes beyond corporate credit, and forward-looking assumptions.

There is no representation that data presented in this report will suffice to draw conclusions linked to investment decisions or make a positive or negative environmental impact claim. Past environmental performance and available proxies for the potential future performance is no guarantee of future results.

The information contained herein is as of December 31, 2023 unless otherwise noted.

This report contains examples of the firm's internal ESG engagement capabilities. The data contained within the report may be stale and should not be relied upon as investment advice or a recommendation of any particular security, strategy or investment product. In selecting case studies, TwentyFour considers multiple factors, including, but not limited to, whether the example illustrates the particular investment strategy being featured and processes applied by TwentyFour to making investment decisions. Information contained herein has been obtained from sources believed to be reliable, but not guaranteed.

We use MSCI and other third-party ratings for reference but make our own assessment based on our own, independent analysis of the industry and relevant ESG factors.

Environmental ("E") factors can include matters such as climate change, pollution, waste, and how an issuer protects and/or conserves natural resources. Social ("S") factors can include how an issuer manages its relationships with individuals, such as its employees, stakeholders, customers and its community. Governance ("G") factors can include how an issuer operates, such as its leadership, pay and incentive structures and internal controls.

ESG investing is qualitative and subjective by nature, and there is no guarantee that the factors utilised by TwentyFour or any judgment exercised by TwentyFour will reflect the opinions of any particular investor, and the factors utilised by TwentyFour may differ from the factors that any particular investor considers relevant in evaluating an issuer's ESG practices.

In evaluating an issuer, TwentyFour is dependent upon information and data obtained through voluntary or third-party reporting that may be incomplete, inaccurate or unavailable, or present conflicting information and data with respect to an issuer, which in e ach case could cause TwentyFour to incorrectly assess an issuer's business practices with respect to its ESG practices. An issuer's ESG practices or TwentyFour's assessment of an issuer's ESG practices may change over time and involves TwentyFour's subjectivity and discretion. There is no assurance that the ESG investing strategy or techniques employed will be successful.

Past performance is not a guarantee or reliable indicator of future results.

Please remember that all investments come with risk. Positive returns, including income, are not guaranteed. Your investment may go down as well as up and you may not get back what you invested.

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