GLOBAL SUSTAINABLE OUTCOMES

News & Views Q4 2022

For professional investors only

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2022 was a tough year for sustainable investing as macroeconomic factors dominated the market. Energy (fossil fuels), a key exclusion for sustainable funds, was the only sector in positive territory across the year. However, sustainable funds tend to be overweight long duration sectors, such as Information and Clean Technology, which endured a brutal de-rating over the year due to the surge in discount rates. Information Technology was also impacted by lower relative earnings growth as the boost to earnings from the surge in online demand during Covid proved less permanent than expected.

For the Columbia Threadneedle Sustainable Outcomes Global Equity (CTSOGE) strategy it has been a tale of two halves. After a weak performance in the first half of the year, the fund rose 4.9% versus 3.5% for the MSCI ACWI benchmark in the second half of the year (including a 3.3% increase in Q4 versus 2% for the MSCI ACWI), benefiting from energy prices peaking in June and expectations around rising inflation and interest rates moderating.[1]

After extreme market bearishness at the end of Q3, we entered 2023 on a more optimistic note. Concerns around blackouts across Europe have abated as favourable winter weather, strong US LNG (liquified natural gas) deliveries and industrial demand reduction returned balance to European natural gas markets, with a corresponding collapse in energy prices. In addition, China responded to domestic pressures to re-open its economy by dropping its strict Covid-19 policies, which in turn helped ease global supply chain bottlenecks.

These events have contributed to an improved outlook for global inflation. But as fears of runaway inflation subsided, fears of a global recession grew. However, with this called the "most forecasted recession in history" many stock valuations by the end of 2022 already reflected an expected earnings crunch in 2023.

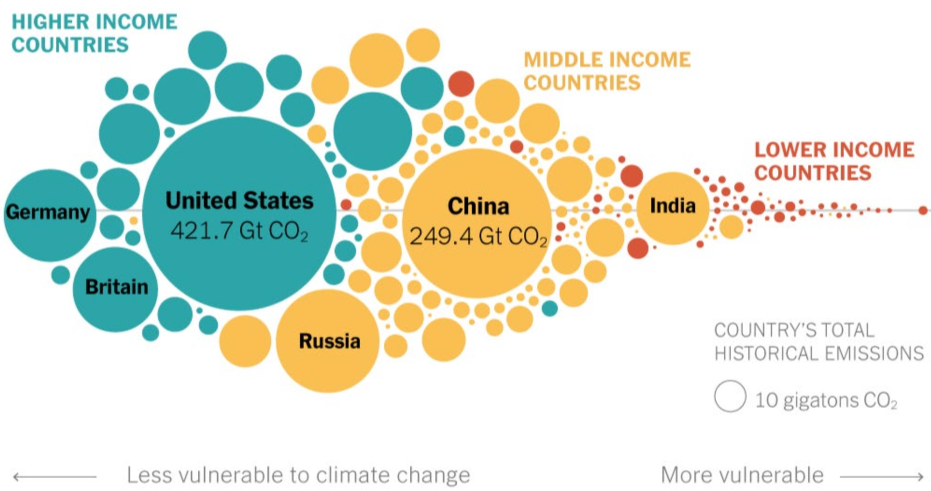
COP 27 was held in Egypt in November and saw the creation of a 'loss and damage' fund. Source: iStock.

COP 27: the 2022 UN Climate Change conference

The COP 27 climate summit in Egypt in November 2022[2] failed to deliver significant progress on climate change. Once again there was no agreement on the "phasing down" of all forms of fossil fuels instead of only coal, and no new stringent targets for emission cuts were announced.

However, the creation of a "Loss and Damage" fund was significant. A key topic at COP 27 was how wealthier nations should help secure financing and support the energy transition for developing nations. This is vital if we have any hope of reaching net zero by 2050 given the faster economic growth, and thus growth of emissions, in these countries.

Figure 1: CO2 emissions and income groups



Source: University of Notre Dame/Global Carbon Project 2022. Income groups reflect IMF designations.

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The global climate crisis is felt the most by countries that are least to blame. Wealthy countries are responsible for half of the world's emissions since 1850 and are better prepared for climate-related disruptions than emerging economies. To address this injustice the fund aims to support vulnerable countries in their energy transition making them more resilient to the adverse effects of climate change.

It is worth noting that no capital has yet been allocated to the fund as COP 27 simply established the working group. Work on the fund is expected to be concluded ahead of COP 28 in 2023.

COP 27 also established a Methane Alert and Response System (MARS) to facilitate progress on the methane pledges made at COP 26 to reduce methane emissions by 30% by 2030. It will use satellite imagery to detect methane leaks, notify the relevant party and track subsequent mitigation. Methane emissions are of material importance to climate change as methane is 80 times worse than CO2 and responsible for 40% of climate warming.[3]

COP 15 – 2022 United Nations Biodiversity conference

The much-anticipated COP 15 in China in December 2022[4] was originally scheduled for October 2020 but delayed due to the Covid-19 pandemic. Sustaining biodiversity is vital for all life on earth, but sadly it is deteriorating at such a rapid rate that scientists have concluded that the effective conservation of 30%-50% of all global land and sea resources is required to ensure a sustainable life-supporting environment.

A key outcome of COP 15 was the signing of a Global Biodiversity Framework (GBF) by almost every country on earth, which aims to halt and reverse biodiversity loss by 2030 through action on 23 goals. The US was notably absent from the signatories making it the only UN member not party to the Convention on Biodiversity. However, President Biden has signaled he will pursue policies aligned to the framework via executive action.

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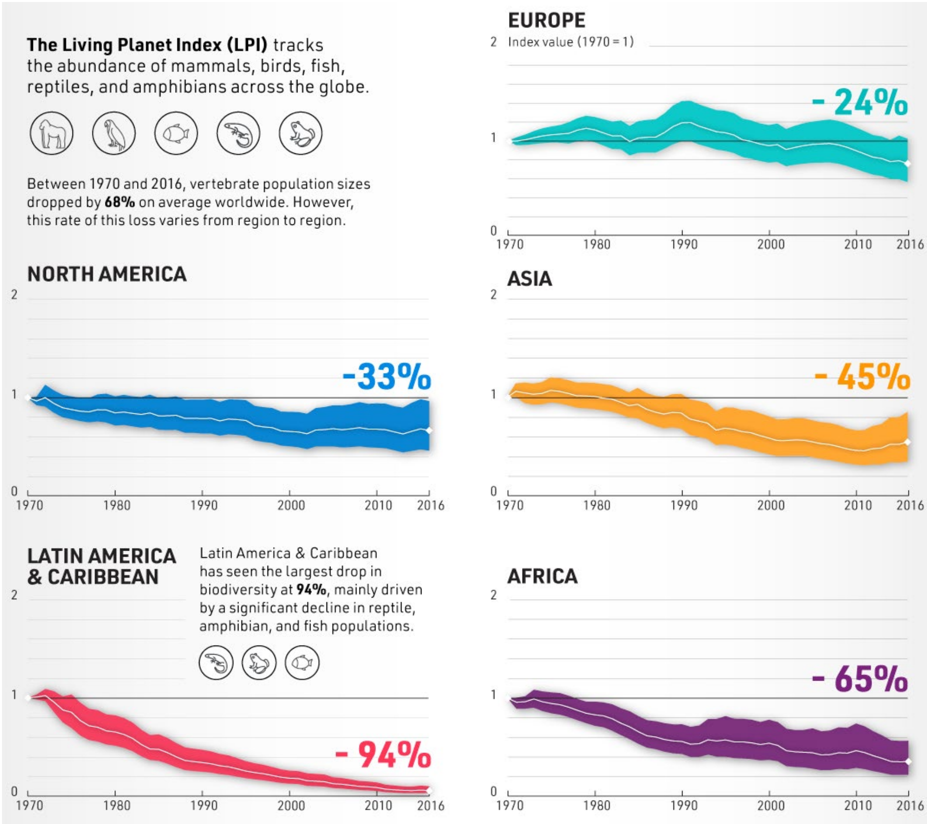
Figure 2: Visualising the regional decline of earth's biodiversity



Source: Living Planet Report, 2020. The Living Planet Index (LPI) tracks the abundance of mammals, birds, fish, reptiles and amphibians across the globe. Between 1970 and 2016, vertebrate population sizes dropped by 68% on average worldwide. However, the rate of this loss varies from region to region.

A key goal of the framework is the conservation of 30% of land and sea areas by 2030, versus the 17% of land and 10% of seas currently protected.

Other 2030 targets include:

- Reduce pollution from fertilisers and pesticides – this is among the most quantified goals in the framework and supports the transition to more sustainable agricultural practices, a key theme within the CTSOGE fund
- Reduce food waste by 50%
- With more than $1.8 trillion in annual subsidies going to industries connected to biodiversity loss, such as fossil fuels (which receive more than $600 billion in subsidies) and agriculture (more than $500 billion, 80% of which is linked to global forest loss, the target is to eliminate or reform more than $500 billion of these subsidies

Just like the Paris climate accord, the biodiversity agreement relies on individual countries working towards these global goals, so its success depends on national-level implementation and regulation.

The framework also targets improved disclosure by corporates and financial institutions around biodiversity risks and impacts from their operations and portfolios. This, along with the introduction of the TFND (Taskforce on Nature-related Financial Disclosures), should escalate reporting around biodiversity impacts to supplement the reporting we currently have around carbon emissions through the TFCD (Taskforce on Climate-Related Financial Disclosures).

The GBF should help increase the focus on nature and biodiversity loss in the global environmental agenda.

[1] See calendar-year performance at end of document.
[2] Unless otherwise stated, all data in the COP 27 section is https://www.un.org/en/climatechange/cop27
[3] https://www.ccacoalition.org/en/slcps/methane
[4] Unless otherwise stated, all data in the COP 15 section is https://www.unep.org/events/conference/un-biodiversity-conference-cop-15
[5] https://www.un.org/en/dayof8billion

Day of Eight Billion[5]

15 November 2022 was the "Day of Eight Billion" when the world's population was projected to reach eight billion people. This is double the population I was born into in the 1970s, with the planet adding 1 billion people in just 12 years!

This milestone can be celebrated given that population growth is not only due to high birth rates in emerging economies, but also to the gradual increase in human lifespan owing to improvements in public healthcare and medicine, nutrition and hygiene.

However, the world also needs to face the sombre fact that to support such a large, growing population – including a rising middle class – we need to invest in more sustainable solutions to protect and preserve the world's finite natural resources.

[5] https://www.un.org/en/dayof8billion

Q4 2022 CTSOGE strategy new company purchases[6]

Company	Sustainable Category	Sustainability in practice
KEYENCE	Leader MSCI BBB Sustainable Resource Management & Transformation	Keyence is a global leader in factory automation equipment. Its machine vision systems are used in the automation of factories helping customers achieve higher levels of productivity (particularly vital in a world facing structural labour shortages), energy savings and improved material utilisation in manufacturing operations. These systems also support greater levels of employee safety. Keyence is a leader in automation product innovation.
Linde	Leader MSCI A Sustainable Resource Management & Transformation	Linde is a global leader in industrial gases. 60% of its product sales enable its customers to achieve resource and energy efficiency.[7] It has a green innovation platform supporting commercialising of green hydrogen and carbon capture technologies. Although it has high carbon intensity, given natural gas is a key input, its products help customers avoid more than two times the greenhouse gas (GHG) emissions Linde produce. In addition, it has set a 2035 Science-based Targets initiative net zero GHG reduction target. It is a key beneficiary of the US Inflation Reduction Act given the policy support given to green hydrogen and carbon capture in the US.

[6] Mention of specific stocks is not a recommendation to deal.
[7] Linde, Sustainable Growth Report, 2022.

Threadneedle Global Equity Sustainable Outcomes Composite

GIPS Report: Columbia Threadneedle Investments EMEA APAC

Reporting Currency: USD

Statement of Performance Results

Calendar Year	Gross-of-fees Return (%)	Net-of-fees Return (%)	Index Return (%)	Composite 3-Yr St Dev (%)	Index 3-Yr St Dev (%)	Internal Dispersion (%)	Number of Portfolios	Total Composite Assets (mil.)	Total Firm Assets (bil.)
2022	-22.56	-23.07	-17.96	20.18	19.86	N.A.	≤ 5	139.1	114.9
2021	19.21	18.45	19.04	14.52	16.83	N.A.	≤ 5	177.7	161.3
2020	28.12	27.30	16.82	N.A.	N.A.	N.A.	≤ 5	1.5	149.8
2019	33.17	32.32	27.30	N.A.	N.A.	N.A.	≤ 5	1.2	140.5

Annualized Trailing Performance as of December 31, 2022

Period	Gross-of-fees Return (%)	Net-of-fees Return (%)	Index Return (%)
1 Year	-22.56	-23.07	-17.96
Inception	12.03	11.31	9.78

Inception Date: December 31, 2018

1. Columbia Threadneedle Investments EMEA APAC 'the Firm' claims compliance with the Global Investment Performance Standards (GIPS®) and has prepared and presented this report in compliance with the GIPS Standards. Columbia Threadneedle Investments EMEA APAC has been independently verified by Ernst & Young LLP for the periods 1st January 2000 to 31st December 2021. The verification reports are available upon request. A firm that claims compliance with the GIPS standards must establish policies and procedures for complying with all the applicable requirements of the GIPS standards. Verification provides assurance on whether the firm's policies and procedures related to composite and pooled fund maintenance, as well as the calculation, presentation, and distribution of performance, have been designed in compliance with the GIPS standards and have been implemented on a firm-wide basis. Verification does not provide assurance on the accuracy of any specific performance report. GIPS® is a registered trademark of CFA Institute. CFA Institute does not endorse or promote this organization, nor does it warrant the accuracy or quality of the content contained herein.
2. The 'Firm' is defined as all portfolios managed by Columbia Threadneedle Investments EMEA APAC (prior to 1 January 2021, the firm was known as Threadneedle Asset Management) which includes Threadneedle Asset Management Limited, (TAML), Threadneedle International Limited, (TINTL), Threadneedle Investments Singapore (Pte.) Limited, (TIS), and Threadneedle Management Luxembourg S.A. (TMLSA), excluding directly invested property portfolios. The firm definition was expanded in 2015 to include portfolios managed by then newly established affiliates of Threadneedle Asset Management in Singapore. TAML & TINTL are authorised and regulated in the UK by the Financial Conduct Authority (FCA). TINTL is also registered as an investment adviser with the U.S. Securities and Exchange Commission and as a Commodities Trading Advisor with the U.S. Commodity Futures Trading Commission. TIS is regulated in Singapore by the Monetary Authority of Singapore. TMLSA is authorised and regulated in Luxembourg by the Commission de Surveillance du Secteur Financier (CSSF). On 1 July 2020, Threadneedle Asset Management Malaysia Sdn. Bhd (TAMM) was removed from the firm. Columbia Threadneedle Investments is the global brand name of the Columbia and Threadneedle group of companies. Beginning 30 March 2015, the Columbia and Threadneedle group of companies, which includes multiple separate and distinct GIPS-compliant firms, began using the global offering brand Columbia Threadneedle Investments.
3. A concentrated global equity strategy with a focus on high quality companies that seeks to deliver both positive sustainable outcomes, in accordance with the UN Sustainable Development Goals (SDGs), and superior financial returns. Derivatives are not allowed. The composite was created November 30, 2018.
4. The gross-of-fees returns are time-weighted rates of return with cash flows at the end of the day. Returns reflect the reinvestment of dividends and other earnings and are net of commissions and other transaction costs. Composite returns are calculated by using underlying portfolio beginning of period weights and monthly returns. Periodic returns are geometrically linked to produce longer period returns. Net of fee returns are calculated by deducting the representative fee from the monthly gross return. Prior to 30th Sept 2022 the gross returns were calculated using daily authorised global close valuations with cash flows at start of the day, and were shown before management and custodian fees but after the deduction of trading expenses. Policies for valuing investments, calculating performance, and preparing GIPS Reports, as well as the list of composite descriptions, list of pooled fund descriptions for limited distribution pooled funds, and the list of broad distribution pooled funds are available upon request.
5. The dispersion of annual returns is measured by the equal weighted standard deviation of portfolio returns represented within the composite for the full year. Dispersion is only shown in instances where there are six or more portfolios throughout the entire reporting period. The Standard Deviation will not be presented unless there is 36 months of monthly return data available.
6. The three year annualised ex-post standard deviation measures the variability of the gross-of-fees composite and benchmark returns over the preceding 36 month period.
7. The following fee schedule represents the current representative fee schedule for institutional clients seeking investment management services in the designated strategy: 0.65% on the first £50m; 0.6% on the next £100m; 0.55% on the next £350m; 0.5% thereafter. Gross of fee performance information does not reflect the deduction of management fees. The following statement demonstrates, with a hypothetical example, the compound effect fees have on investment return: If a portfolio's annual rate of return is 10% for 5 years and the annual management fee is 65 basis points, the gross total 5-year return would be 61.1% and the 5-year return net of fees would be 55.9%.
8. The benchmark for this strategy is the MSCI AC World Index. The MSCI AC World Index is designed to provide a broad measure of equity-market performance throughout the world and is comprised of stocks from 23 developed countries and 24 emerging markets Index returns reflect the reinvestment of dividends and other earnings and are not covered by the report of the independent verifiers.
9. Past performance is no guarantee of future results and there is the possibility of loss of value. There can be no assurance that an investment objective will be met or that return expectations will be achieved. Care should be used when comparing these results to those published by other investment advisers, other investment vehicles and unmanaged indices due to possible differences in calculation methods.
10. The percentage of non-fee-paying assets in the composite as of the end of 2020 and 2019 were 100% and 100% respectively. By the end of 2021 it was 0%.
11. Prior to 31st March 2022 the composite was known as Threadneedle Global Sustainable Equity Composite. This was a name change only.

To find out more, visit **columbiathreadneedle.com**

Important Information: