

Biodiversity Risk Codebook

1. Aggregate Risks

nyt_indices		
Variable Name	Type	Description
date	float	Date is in “D-M-Y” format
biodiversity	float	NYT Biodiversity News Index: the number of negative biodiversity articles minus the number of positive biodiversity articles on a given day
climate	float	NYT Climate News Index: the number of negative climate articles minus the number of positive climate articles on a given day

google_biodiversity_attention_index		
Variable Name	Type	Description
month	float	Month is in “YM” format
attention	float	Google Biodiversity Attention Index: the sum of the search index series for “biodiversity loss”, “ecosystem services”, and “species loss” in a given month

2. Biodiversity Risk Exposure

10k_biodiversity_scores		
Variable Name	Type	Description
ticker	string	ticker
year	float	year
cusip	string	cusip
count	float	10K-Biodiversity-Count Score: does the company mention biodiversity in at least two sentences in the 10-K statements?
negative	float	10K-Biodiversity-Negative Score: the number of negative biodiversity sentences minus the number of positive biodiversity sentences
regulation	float	10K-Biodiversity-Regulation Score: does the company mention biodiversity in at least two sentences and at least one of them is about regulation in the 10-K statements?

survey_biodiversity_scores		
Variable Name	Type	Description
gics4	string	4-digit GICS Industry Code
transition	float	Transition biodiversity risk exposure: share of the survey respondents who select each industry as being particularly affected by transition risk.
physical	float	Physical biodiversity risk exposure: share of the survey respondents who select each industry as being particularly affected by physical risk.
average	float	Survey-based Biodiversity Score: the simple average of transition and physical biodiversity risk exposure

holding_biodiversity_scores		
Variable Name	Type	Description
gics4	float	4-digit GICS Industry Code
score	float	Holding-based Biodiversity Score: the weight of a given industry in the market portfolio minus the weight of the given industry in the biodiversity funds' portfolio.

county_biodiversity_scores		
Variable Name	Type	Description
year	float	year
GEOID	string	County Fips
GeoName	string	County Name
gdp_bio	float	GDP-Based Biodiversity Score: computed as the average industry biodiversity scores weighted by GDP of each industry (Data source: Bureau of Economic Analysis)
emp_bio	float	Employment-Based Biodiversity Score: computed as the average industry biodiversity scores weighted by the number of people employed in each industry (Data source: County Business Pattern)
species_bio	float	Endangered Species Score: computed as the share of endangered species (% of all species) (Data source: IUCN Red List of Threatened Species)
area_bio	float	Protected Area Score: computed as the share of protected area (% of total area) (Data source: Protected Areas Database of the United States)

country_biodiversity_scores		
Variable Name	Type	Description
year	float	year
country_code	string	Country Code
country_name	string	Country Name
continent	string	Continent
bio_index_degradation	float	IMF-Degradation Biodiversity Score: does the country mention biodiversity degradation in IMF reports?
bio_index_regulation	float	IMF-Regulation Biodiversity Score: does the country mention biodiversity regulation in IMF reports?
bio_species	float	Endangered Species Score: computed as the share of endangered species (% of all species) (Data source: IUCN Red List of Threatened Species)