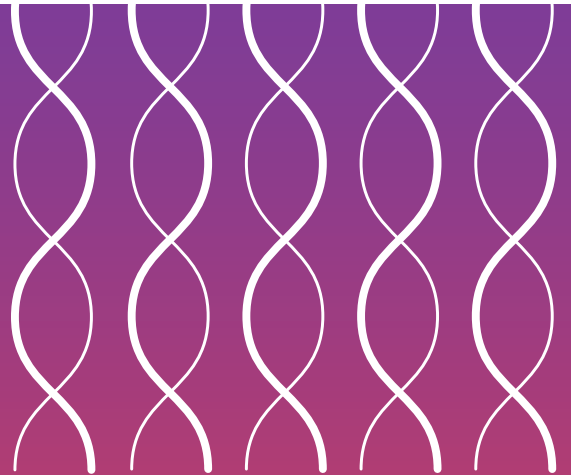


Sustainable dividends for sustainable investors



Authors



Dan Lefkovitz
Strategist,
Morningstar Indexes



Saumya Gattani
Senior Quantitative Analyst,
Morningstar Indexes, New Product Development

A forward-looking approach to equity income and ESG investing

Executive summary

Dividend-paying stocks rarely capture headlines. In any given year, the market's highest fliers are typically fast-growing companies; they're often unprofitable, let alone at the stage of their corporate life cycle where they're returning cash to shareholders. Dividend payers are often dismissed as boring, especially during times of market exuberance.

Yet dividends remain a fundamental pillar of equity investing. Retirees and others looking to extract income from their investment portfolios rely on regular payouts, especially when bond yields are low. Reinvested dividends account for a significant share of equity market return—roughly one third for the 20 years through the end of 2021. Several studies over the years have demonstrated that dividend payers possess a long-term performance advantage relative to the overall market.

Of course, there are risks associated with equity-income investing. The market's highest yields often belong to the shares of troubled companies whose shareholder payouts are ultimately unsustainable. Reducing, suspending, or eliminating a dividend is often the first response to distress. Scores of companies across the globe cut their payouts in 2020 amid the pandemic-driven downturn, though it doesn't take a crisis for competition and balance sheet pressure to jeopardize dividends. Investing without regard to dividend durability can be perilous.

A selective approach is also advisable for investors with sustainability-related objectives. Significant dispersion exists between companies carrying significant environmental, social, and governance-related risk, and those for whom ESG issues will likely have little financial impact. Avoiding ESG risk is becoming ever more critical, as companies face pressure to deliver for all stakeholders.

Dividends and sustainable investing are infrequently paired. Many economic sectors that tend to be dividend rich, including energy, basic materials, and industrials, are also areas of heightened ESG risk. Yet research can uncover businesses across the economy that effectively manage issues like carbon emissions, workforce relations, and business ethics.

For sustainable investors with equity income objectives, the Morningstar Sustainability Dividend Yield Focus Indexes highlight attractive dividend yields while mitigating ESG risk. The indexes employ proprietary, forward-looking screens to identify companies that are well-positioned to sustain their dividends due to competitive advantage and financial health. The indexes' screens have been effective predictors of dividend durability over the long term. Meanwhile, the indexes use company-level ESG risk assessments from Sustainalytics, a global leader in sustainable investing research. The goals are income, return, and ESG risk mitigation.

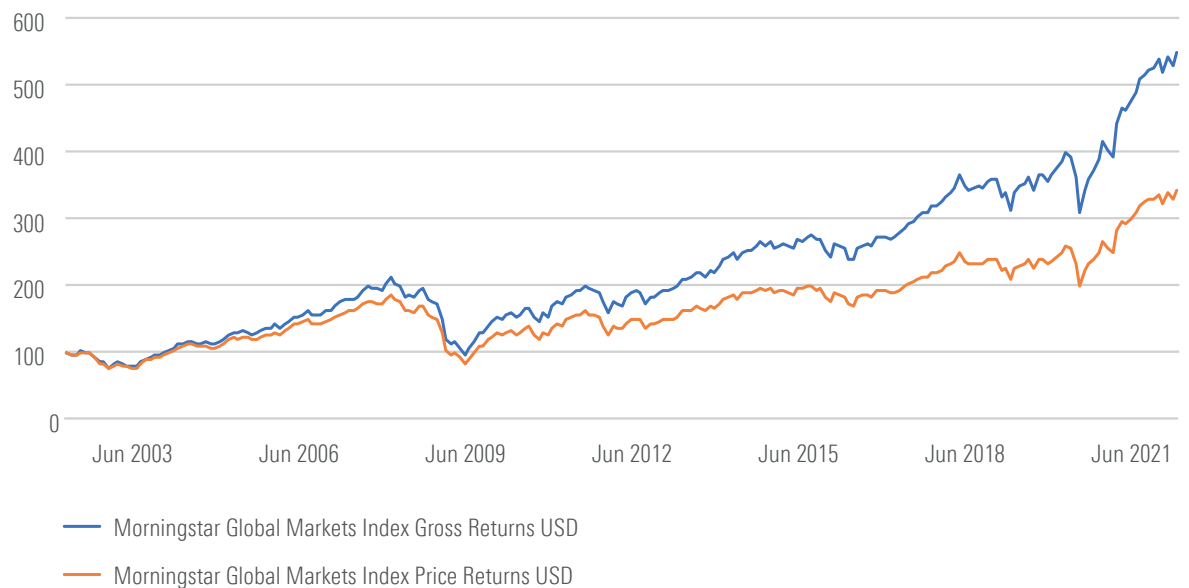
Dividends for both income and total return

Investors have long prized equities that produce a regular income stream. Dividends represent a means of extracting value from a portfolio without selling shares at volatile prices or incurring taxable events. This has been true since the early days of stock market investing—with shipping expeditions from Amsterdam and London that included payouts to shareholders. It has been especially true in recent years, as rock-bottom interest rates and low bond yields have sent income investors into equities. Demographics have also contributed to asset flows into dividend-focused strategies. When investors move from the accumulation phase of life into retirement, demand for income grows.

Yet this is not to overlook the contribution of dividends to the long-term total return produced by the stock market. Exhibit 1 below depicts two variants of the Morningstar Global Markets Index, a broad gauge of equities across developed and emerging markets. The Gross Return variant assumes that any dividend paid out by an index constituent is reinvested or used to buy new shares. The Price Return variant considers only price movements (capital gains or losses), while the income generated, in the form of interest and dividends, is ignored.

The difference between the two variants is staggering. Thanks to the power of compounding, the Gross Return variant climbed 5.5 times over the 20-year period ended December 2021, while the Price Return variant grew just 3.4 times. Put another way, a hypothetical investment of \$10,000 in the Gross Return variant became \$550,063 over 20 years, while the same amount invested in the Price Return variant returned \$342,303.

Exhibit 1 Reinvested dividends have contributed roughly one third of equity market total return over the past 20 years



Source: Morningstar Direct. Data as of Dec. 31, 2021.

Additionally, dividend-paying stocks demonstrate a long-term performance advantage. Yield is sometimes identified as a “factor” — a driver of excess return — while others believe that dividend payers do well because they tend to occupy the lower-priced portion of the market (the so-called “value effect”). In any case, the track record is strong, and it spans geography.

As displayed in Exhibit 2, the high-yield section of the equity market owns the best long-term returns in the U.S., Asia Pacific, and Europe. Across regions, companies that do not pay dividends have underperformed the overall market. The following risk and return comparisons use dividend portfolios displayed on the French Data Library’s website. They are formed based on dividend yields at the end of December and reconstituted annually. Like the market indexes they are compared against, they are weighted by market capitalization. The data set for the U.S. goes back longest and is updated fastest.

Exhibit 2 Dividend-paying stocks have a stellar long-term track record across geography

Europe (excluding UK)

1975-2020	Return %	Risk %	Return/Risk	RSQ	Value of Dollar Invested in 1975 (\$)
Non- Payers	7.0	22.3	0.31	0.81	22.37
Low Yield	9.9	18.2	0.54	0.95	76.40
High Yield	12.5	19.0	0.66	0.92	221.98
Market	10.6	17.8	0.59	1.00	101.71

Asia Pacific

1975-2020	Return %	Risk %	Return/Risk	RSQ	Value of Dollar Invested in 1975 (\$)
Non- Payers	8.1	25.9	0.31	0.67	36.12
Low Yield	6.0	20.1	0.30	0.92	18.01
High Yield	12.7	19.6	0.65	0.83	245.44
Market	9.1	19.1	0.48	1.00	55.65

Scandinavia

1987-2020	Return %	Risk %	Return/Risk	RSQ	Value of Dollar Invested in 1987 (\$)
Non- Payers	7.9	71.4	0.11	0.06	13.40
Low Yield	9.8	23.2	0.42	0.90	24.00
High Yield	13.5	21.7	0.62	0.80	73.19
Market	11.3	21.4	0.53	1.00	37.91

Australia

1975-2020	Return %	Risk %	Return/Risk	RSQ	Value of Dollar Invested in 1975 (\$)
Non- Payers	2.8	35.2	0.08	0.62	3.58
Low Yield	10.0	26.3	0.38	0.90	81.67
High Yield	14.8	22.4	0.66	0.84	593.10
Market	11.1	23.1	0.48	1.00	127.04

Japan

1975-2020	Return %	Risk %	Return/Risk	RSQ	Value of Dollar Invested in 1975 (\$)
Non- Payers	8.0	28.4	0.28	0.63	35.03
Low Yield	5.7	21.4	0.27	0.91	12.66
High Yield	11.6	21.2	0.55	0.81	154.71
Market	8.6	20.2	0.43	1.00	44.78

UK

1988-2020	Return %	Risk %	Return/Risk	RSQ	Value of Dollar Invested in 1988 (\$)
Non- Payers	5.9	29.1	0.20	0.46	6.66
Low Yield	6.0	18.8	0.32	0.89	6.82
High Yield	8.7	19.6	0.44	0.80	15.59
Market	7.4	16.9	0.44	1.00	10.71

US

1927-2021	Return %	Risk %	Return/Risk	RSQ	Value of Dollar Invested in 1927 (\$)
Non- Payers	9.6	29.3	0.33	0.84	5,648.35
Low Yield	9.6	19.5	0.49	0.93	5,505.80
Mid Yield	10.6	17.8	0.60	0.93	12,876.82
High Yield	11.0	19.7	0.56	0.80	17,705.93
Market	10.0	18.5	0.54	1.00	7,830.70

Source: French Data Library.

This record of outperformance aligns with the findings of several seminal studies. Litzenberger and Ramaswamy published an influential paper in 1979 observing that stocks paying above-average yields tend to produce superior performance.¹ Jeremy Siegel's *The Future for Investors*² demonstrated that the highest-yielding stocks in the U.S. market outperformed the overall market by a substantial margin from 1958 to 2003. Triumph of the Optimists by Dimson, Marsh, and Staunton, examined equity market returns in four continents and 16 countries over a 101-year period, 1900–2001, concluding that reinvested dividends and dividend growth were key return drivers.³

Equity income investing is far from risk free.

Why do dividend-paying companies perform well? Several factors are likely at play. Dividend payers tend to be established, steadier-than-average companies, confident enough in their cash flows to commit to returning cash to shareholders. Because investors are extracting income from their stock holdings, they are less likely to sell on bad news. Shareholder loyalty dampens volatility.

Perhaps most importantly, the dividend commitment instills discipline. Corporate managers and directors find cash piles tempting. Paying a dividend puts profits in the hands of shareholders and removes the temptation to pursue acquisitions that may or may not create value, buy back shares at questionable valuations, or fund speculative growth initiatives. Over time, the pressure to maintain dividends nudges management to steer a prudent course.

Beware dividend traps

It's critical to emphasize, however, that equity income investing is far from risk free. Dividend stocks tend to cluster on the value side of the market, so in periods of growth stock dominance, equity income strategies can lag. This includes recent years, which have been led by the technology sector—an era once referred to as the “FAANG” market (for Facebook, Apple, Amazon.com, Netflix, and Google). Rising interest rates are sometimes, but not always, bad for dividend payers, because they make bonds and cash more attractive for income investors.

But “dividend traps” are a perennial risk and the reason that investor Raymond DeVoe, quoted in the 2010 Berkshire Hathaway shareholder letter, famously wrote: “More money has been lost reaching for yield than at the point of a gun.” Securities often throw off a high yield because fundamental challenges are depressing their share prices. A stock can lure investors with an impressive payout only to experience financial distress, cut or suspend its dividend, and ultimately experience share price depreciation.

Morningstar first built its Dividend Yield Focus Index in 2010, in the wake of a global financial crisis lined with dividend traps. In the 2007–09 period, dozens of once-steady payers ran into trouble, including some companies considered equity income champions. Businesses exposed to the U.S. housing market—names like GE, Bank of America, and AIG—suspended their dividend payments. At various stages of the crisis, some of these pressured stocks sported double-digit yields. Investors who were tempted by lofty payouts found themselves holding devalued shares. Then there was the experience of companies in the energy and basic materials sectors in 2014–15. Depressed commodity prices pressured margins. Stalwarts like Rio Tinto, Conoco Phillips, and Freeport-McMoran were all forced to cut their dividends.

¹ Litzenberger, Robert H., and Krishna Ramaswamy, June 1979, “The Effect of Personal Taxes and Dividends on Capital Asset Prices: Theory and Empirical Evidence,” *Journal of Financial Economics* 7, 163-195

² Siegel, Jeremy, *The Future for Investors* (Crown Business, 2005)

³ Dimson, Marsh, and Staunton, *Triumph of the Optimists* (Princeton University Press, 2002)

Companies assigned wide or narrow economic moats have been likelier to sustain their dividends.

In 2020, the pandemic-driven economic collapse led more than one third of the dividend payers in the Morningstar Global Markets Index to cut their payouts. Plunging oil prices led energy companies like Marathon, CNOOC, and Equinor to drop their payouts. Consumer-facing businesses like Adidas and Nissan cut dividends due to falling demand. Financial services stalwarts, including UBS, Westpac, and Capital One, were undermined by low interest rates and loan losses. Komatsu, SK Hynix, EDF, and Mitsubishi Estate are other examples across sector and geography that made 2020 the biggest year for dividend cuts since 2008.

Dividend strategies reliant on backward-looking criteria, such as historical dividend payments, were blindsided by many of these cuts. Bank of America's track record of dividend payments reached back to the 1980s before it cut in 2008. In 2020, Royal Dutch Shell reduced its dividend for the first time since World War II.

A selective, forward-looking approach to dividends

The fact that a company has paid out a dividend for 10, 20, or more years does not tell you much about its payout capacity going forward. The economy changes and companies considered "blue chips" or "dividend aristocrats" can fall upon hard times. But how are dividend payers best selected for future durability?

Because of the limitations of equity income investing based on backward-looking data, the Morningstar Dividend Yield Focus Index employs two key forward-looking screens:

- Economic Moat
- Distance to Default

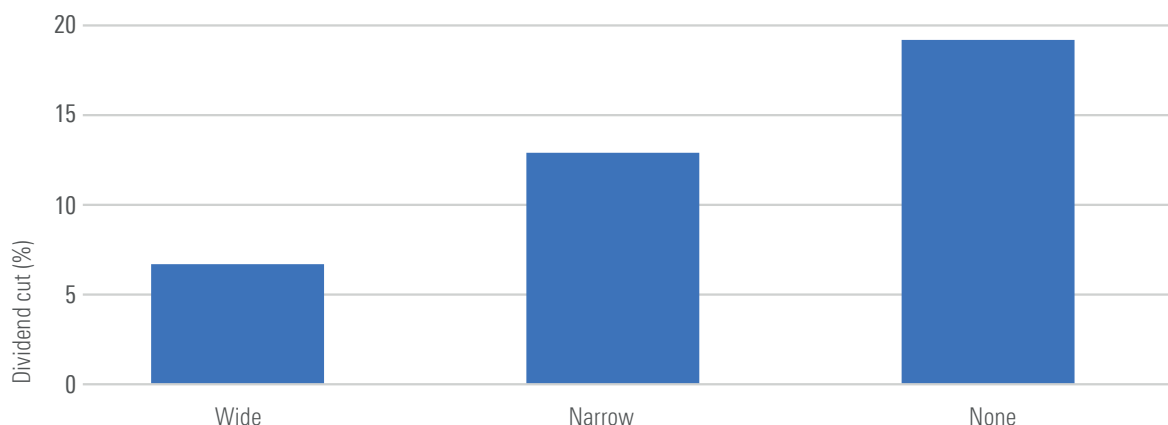
A company with an economic moat around its business possesses a competitive advantage that leads to profitability. Morningstar's Equity Research team turned a Warren Buffett concept into a methodological framework, assigning economic moat ratings to the more than 1,500 companies it covers—a universe divided roughly evenly between the U.S. and the rest of the world. A moat protects a company's profits from competition—in the same way that medieval castles kept enemies at bay with water-filled trenches. Profits are defined as returns on invested capital over and above a firm's estimated cost of capital, or weighted average cost of capital.

To earn a narrow or wide economic moat rating, a company must possess a structural feature that prevents excess returns from quickly eroding. Morningstar Equity Research has identified five sources of economic moat: intangible assets, switching costs, network effect, cost advantage, and efficient scale. Moat ratings are determined through a rigorous, peer-reviewed process using both quantitative and qualitative inputs.⁴

As displayed in Exhibit 3, companies assigned wide or narrow economic moats have been likelier to sustain their dividends across geographies going back more than 15 years than no moat companies (While the Dividend Yield Focus Index was launched in 2010, Moat Ratings and the Distance to Default measure predate the index).

⁴ Please refer to the [Morningstar Equity Research Methodology](#) for more information.

Exhibit 3 Companies with economic moats have been likelier to sustain dividends

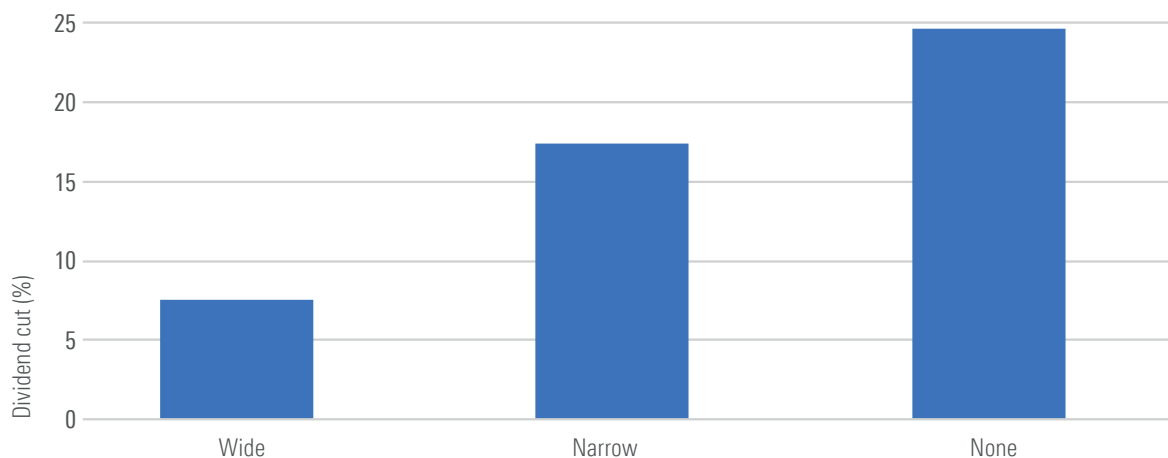


Source: Morningstar Indexes. Time Period Studied: 2005-2021,

In 2013, Morningstar developed a Quantitative Economic Moat Rating designed to extend coverage beyond analysts' ratings. The quantitative moat rating spans more than 50,000 stocks across developed and emerging markets. The Quantitative Economic Moat Rating is analogous to Morningstar's Economic Moat Rating in that both are meant to describe the strength of a firm's competitive position. It is calculated using a machine-learning algorithm designed to predict the economic moat rating a Morningstar analyst would assign to the stock. The quantitative rating is expressed as none, narrow, or wide.⁵

As displayed in Exhibit 4, companies with quantitatively assigned moats have also been likelier to sustain their dividends across geographies. Quantitatively assigned moats have been simulated prior to 2013.

Exhibit 4 Companies with quantitatively assigned moats have been more likely to sustain dividends



Source: Morningstar Indexes. Time Period Studied: 2005-21,

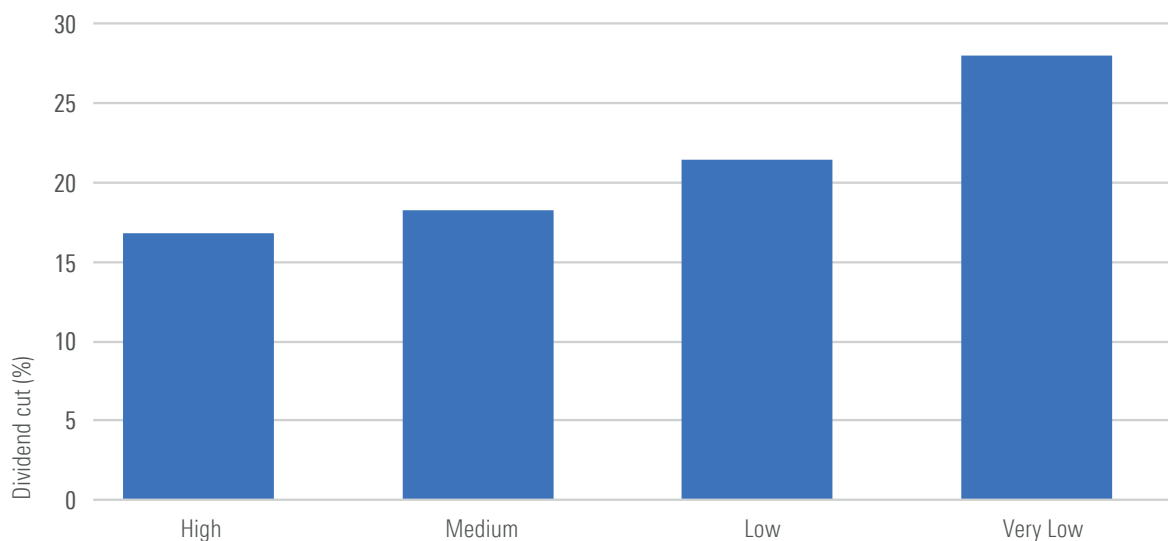
⁵ Please refer to the [Morningstar Quantitative Equity & Credit Ratings methodology](#) for more information.

Whereas the moat rating is a long-term indicator, the Distance to Default measure is dynamic and market-driven.⁶ Morningstar's quantitatively determined DTD metric ranks companies on likelihood of financial distress, using option-pricing theory to evaluate the risk that a company's assets will fall below the sum of its liabilities. Balance sheet data, including short- and long-term liabilities, is a critical input. So is market-related information. A company's equity value, most importantly the volatility of a company's equity, can be a leading indicator of problems, reflecting deterioration well before it shows up in financial statements.

If a company has a shaky balance sheet, struggles with solvency, or experiences share price volatility due to questions regarding its long-term viability, future dividend payments may be in jeopardy. After all, dividends are not guaranteed. Owners of regular shares don't have the kind of claims on a company's assets enjoyed by debtholders. For the purposes of dividend index selection, stocks are compared with peers based on DTD score, and companies that fall under a given threshold are ineligible for consideration.

As depicted in Exhibit 5, DTD has also been an effective predictor of dividend cuts. Dividing the universe of dividend payers into four equal bands (quartiles) by their DTD scores, companies with better scores were less likely to cut their dividends.

Exhibit 5 Companies with better distance to default scores have been less likely to cut dividends



Source: Morningstar Indexes. Time Period Studied: 2005-2021,

⁶ Please refer to the [Morningstar Indexes Distance to Default methodology](#) for more information.

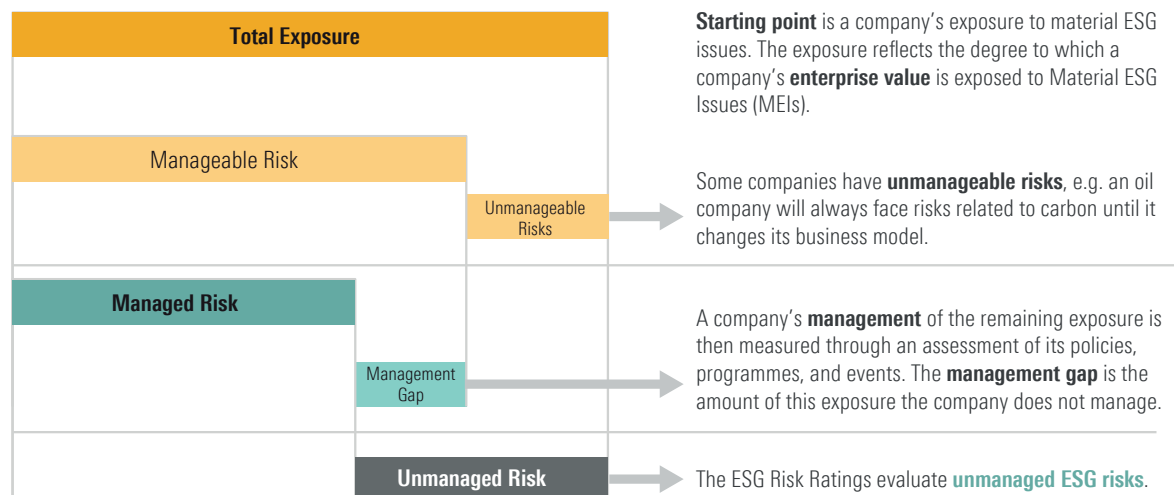
Integrating ESG into investing

Sustainable investing is still described using terms like “responsible,” “ethical,” and “doing good” — often said to be appropriate for those who want to “align their portfolios with their values.” While values remain an aspect of sustainable investing, the field has evolved considerably in recent years.

Environmental, social, and governance-related issues are increasingly considered material financial risks. As stakeholder capitalism becomes a mainstream concept, business faces rising expectations — not just from shareholders but also consumers, communities, and employees — to address sustainability challenges. Issues like climate change, diversity, and business ethics are seen to have an impact on enterprise value. The CFA Institute “now encourages all investment professionals to consider ESG factors,” viewing their integration as “consistent with a manager’s fiduciary duty to consider all relevant information and material risks in investment analysis and decision-making.” In a joint statement, some of the world’s largest asset owners, Japan’s Government Pension Investment Fund, the UK’s USS Investment Management, and California State Teacher’s Retirement System, wrote: “Asset managers that only focus on short-term, explicitly financial measures, and ignore longer term sustainability-related risks and opportunities are not attractive partners for us.”

Sustainalytics, a Morningstar company and leading global provider of ESG research and ratings, serves investors focused on such risks and opportunities. The Sustainalytics ESG Risk Rating,⁷ its flagship analytic, measures the degree to which a company’s economic value is at risk from ESG factors. Sustainalytics assesses firms’ exposure to and management of ESG-related risks that are financially material. Key ESG issues vary by industry and can be mitigated by a company’s efforts. Risk ratings are absolute, not relative, and are therefore comparable across sector and industry. Roughly 13,000 companies are rated globally.

Exhibit 6 Sustainalytics ESG Risk Rating



Source: Sustainalytics, a Morningstar company

⁷ Please refer to the [Sustainalytics ESG Risk Rating methodology](#) for more information

Foundational to the ESG Risk Rating are 20 Material ESG Issues (MEIs) that Sustainalytics has identified as capable of affecting a company's value. Examples of MEIs include:

- Occupational health and safety
- Product governance
- Data privacy and security
- Human rights, supply chain






Exposure to MEI's varies by industry, subindustry, and company. Data privacy is more critical for a bank than a mining company for whom health and safety concerns are paramount. Product governance is especially germane to pharmaceuticals companies, while human rights in a supply chain is an issue faced by manufacturers.

The ESG Risk Rating is assigned on a scale of 0-100, that is converted into five buckets:

- 0–10 = negligible
- 10–20 = low
- 20–30 = medium
- 30–40 = high
- 40-plus = severe

The Sustainalytics ESG Risk Rating is the foundation for the portfolio-level Morningstar Sustainability Rating for funds, launched in 2016.⁸ The Morningstar Sustainability Rating is expressed as 1 to 5 "globes," whereby a higher number of globes indicates that the portfolio has lower financially material ESG Risk. The Sustainability Rating is based on fund portfolios and considers 12-months of holdings history. Within Morningstar's global peer groups, the top 10 percent of funds receive a High (5-globe) rating, and so on, as displayed in Exhibit 7.

Exhibit 7 Morningstar Sustainability Rating for Funds

Percent Rank	Sustainability Rating	Ordinal Rating	Rating Description
Highest 10%		5	High
Next 22.5%		4	Above Average
Next 35%		3	Average
Next 22.5%		2	Below Average
Lowest 10%		1	Low












Source: Morningstar.

⁸ Please refer to the [Morningstar Sustainability Rating methodology](#) for more information.

Indexing for durable dividends with low ESG risk

Identifying dividend-paying companies can be challenging for sustainable investors. Dividend paying companies often cluster in old economy sectors that are not only carbon intensive but can carry elevated ESG risk in areas like health and safety and community relations. The Morningstar Global High Dividend Yield Index, a broad gauge of the higher yielding section of equities across developed and emerging markets is generally more exposed to areas of higher ESG risk, such as basic materials, energy, and utilities, relative to the broad global equity market, and less exposed to technology, an area of low ESG risk.

Exhibit 8 Dividends are clustered in areas of elevated ESG risk

Sectors	Morningstar Global High Dividend Yield	Portfolio Corporate Sustainability Score*	Morningstar Global Markets Index
 Basic Materials	9.1	28.4	4.9
 Communication Services	5.8	21.8	8.1
 Consumer Cyclical	6.7	22.4	12.0
 Consumer Defensive	9.2	23.8	6.7
 Healthcare	8.5	23.8	11.6
 Industrials	9.7	24.5	10.8
 Real Estate	2.6	15.1	3.6
 Technology	8.1	16.9	21.2
 Energy	7.0	33.1	3.4
 Financial Services	27.5	22.4	15.0
 Utilities	5.9	28.4	2.7

Data as of 11/30/21. Source: Morningstar Direct. Sectors represented by Morningstar Global Sector Indexes.

*Weighted-average of Sustainalytics' ESG Risk Ratings

Research must therefore be brought to bear to identify dividend paying companies with lower ESG Risk. Of course, dividend payers must also be screened for durability, to avoid the traps described earlier. Sustainability in all its dimensions — corporate payouts and ESG — is a worthy investment goal.

The Morningstar Sustainability Dividend Yield Focus Indexes⁹ are designed to track the performance of companies with attractive dividend yields and strong financial quality while mitigating ESG risk.

⁹ Please refer to the [Morningstar Sustainability Dividend Yield Focus Index Family rulebook](#) for more information

Index eligibility

The indexes derive constituents from their equivalent regional index from the Morningstar Global Markets Indexes. To be eligible, a security must have paid a dividend in the last 12 months, be assigned a Sustainalytics ESG Risk Rating, a Sustainalytics ESG Controversy Score, a Morningstar Economic Moat Rating or a Quantitative Moat Rating, and a Morningstar Distance to Default Score. Liquidity requirements also apply.

Sustainability screens

Because of the indexes' sustainability focus, a company is ineligible for index membership if it:

- derives more than 50% of its revenue from tobacco products
- is involved in the production of controversial weapons (land mines, for example)
- has a Sustainalytics Controversy Score of "Severe" (5 on a 5-point scale)

Because companies are selected based on their ESG Risk Ratings, they must be under coverage by Sustainalytics to be eligible.

Quality, financial health, and yield screens

To target high-quality, dividend-yielding stocks that are financially sustainable, the index applies the following screens:

- Companies that are assigned Morningstar Economic Moat Ratings of wide or narrow must land in the top 50% of their region-sector cohort by Morningstar Distance to Default Score. To minimize turnover, current index constituents that drop below the 50% threshold will remain eligible if they score in the top 60% of their region-sector cohort.
- Companies that do not have a Morningstar Economic Moat Rating or a Morningstar Quantitative Moat Rating must have a Distance to Default Score in the top 30% of their Region-Sector cohort. To minimize turnover, current index constituents fitting this description must rank in the top 36% of their peer group.
- Stocks must have paid a qualified dividend in the last 12 months.

Portfolio construction

Once the sustainability, quality, and financial health screens are applied, a fixed count of stocks with the highest trailing 12-month dividend yield is selected. The Sustainalytics ESG Risk Rating for each eligible security in the resulting list is rolled up to create a portfolio level ESG Risk Rating, which is translated into a Morningstar Sustainability Rating (from 1 to 5 Globes) and compared to its peers within the relevant Morningstar Fund Category. If the resulting portfolio does not attain a Morningstar Sustainability Rating of 5 Globes, corresponding to the top 10% in its category, the bottom 25% of eligible securities (sorted by their Sustainalytics ESG Risk Rating) are removed. If necessary, additional securities are removed in increments of 5% index weight until the aggregate index portfolio achieves a Morningstar Sustainability Rating of 5 Globes.

Index weighting

The indexes are weighted in proportion to the value of each stock's trailing 12-month dividend payments, which considers dividend per share and number of shares. Stocks representing more than 5% of the index cannot collectively exceed 50% of total index weight. Exposure to individual economic sectors is capped at 40%, or 5 times the weight of the sector in the parent index.

Sustainability in all its dimensions — corporate payouts and ESG — is a worthy investment goal.

Rebalancing and reconstitution

The index is reconstituted semiannually in June and December and rebalanced quarterly. At the quarterly rebalances, index weights are reset, and current constituents are reviewed and removed if they do not pass the product involvement or controversy screens.

Delivering income, competitive risk-adjusted returns, and low ESG risk

For income investors, a dividend-paying strategy must possess a well-above-market yield and must also be competitive from a risk/return standpoint. The Morningstar Global Sustainability Dividend Yield Focus Index, the most inclusive variant, carried a significantly higher yield than the global equity market as of the end of 2021. Its yield is slightly lower than its non-ESG equivalent, the Morningstar Global Dividend Yield Focus Index.

Exhibit 9 Sustainable dividends can produce high income

Index	Yield
Morningstar Global Markets Sustainability Dividend Yield Focus Index	3.35
Morningstar Global Dividend Yield Focus Index	3.89
Morningstar Global Markets Index	1.68

Source: Morningstar Indexes. Data as of Dec. 31, 2021.

From the perspective of relative returns, equity market dynamics in recent years have put dividend strategies at a disadvantage. The technology sector, which tends to be light on dividends and has come to represent a massive share of equity markets, has been the best performer globally. During tech sector pullbacks, dividend strategies' relative returns improve. Interestingly, the Sustainability Dividend Yield Focus Index had more exposure to technology than its non-ESG equivalent. By contrast it has substantially less exposure to the carbon-intensive energy sector.

Indeed, dividends-focused investments' rankings improve when adjusted for risk. The Morningstar Global Sustainability Dividend Yield Focus Index had a 10-year standard deviation of returns (a measure of volatility) of 11.8% compared with 13.3% for the Morningstar Global Markets Index and 12.3% for the Morningstar Global Dividend Yield Focus Index as of the end of 2021. This is consistent with other Morningstar observations that ESG screening lowers risk.

Compared with the overall global equity market and its non-ESG equivalent, the dividend index also had a higher 10-year Treynor ratio, which measures the relationship between annualized risk-adjusted return and risk. During down markets over the past 10 years the dividend index lost far less than the market, as measured by the downside capture ratio. If the coming years are less buoyant for equity markets, relative returns for dividends strategies should improve. From the perspective of mitigating ESG risk, the Morningstar Global Sustainability Dividend Yield Focus Index looks far superior to the overall market and to its non-ESG equivalent.

Exhibit 10 ESG risk mitigation within the dividends universe

Index	Portfolio Corporate Sustainability Score
Morningstar Global Sustainability Dividend Yield Focus Index	19.3
Morningstar Global Dividend Yield Focus Index	24.0
Morningstar Global Markets Index	22.2

Source: Morningstar Indexes. Data as of Nov. 30, 2021.

While dividend-paying stocks are a superb means of participating in equity markets over the long term, they should be approached selectively. Backward-looking screens are limited in their ability to identify the dividends of tomorrow. For sustainable investors, locating companies carrying low levels of ESG risk takes careful research. The Morningstar Sustainability Dividend Yield Focus Indexes emphasizes companies that are well-positioned dividend payers while mitigating ESG risk.

About Morningstar Indexes

Morningstar Indexes was built to keep up with the evolving needs of investors—and to be a leading-edge advocate for them. Our rich heritage as a transparent, investor-focused leader in data and research uniquely equips us to support individuals, institutions, wealth managers and advisors in navigating investment opportunities across major asset classes, styles and strategies. From traditional benchmarks and unique IP-driven indexes, to index design, calculation and distribution services, our solutions span an investment landscape as diverse as investors themselves.

Contact Us

Call	Australia	+61 2 9276 4446	India	+91 22 6121 7123
	Canada	+1 312 384 3735	Japan	+81 3 5511 7540
	Europe	+44 203 194 1401	Singapore	+65 6340 1285
	Hong Kong	+852 2973 4680	U.S.	+1 312 384 3735

Email indexes@morningstar.com

Visit indexes.morningstar.com

©Morningstar, Inc. 2022. All Rights Reserved. This presentation includes proprietary materials of Morningstar; reproduction, transcription or other use, by any means, in whole or in part, without prior written consent of Morningstar is prohibited.

The information, data, analyses and opinions contained herein (1) include the confidential and proprietary information of Morningstar, (2) may not be copied or redistributed, (3) do not constitute investment advice offered by Morningstar, (4) are provided solely for informational purposes and therefore are not an offer to buy or sell a security, and (5) are not warranted to be correct, complete, accurate or timely. Opinions expressed are as of the date written and are subject to change without notice. Except as otherwise required by law, Morningstar shall not be responsible for any trading decisions, damages or other losses resulting from, or related to, this information, data, analyses or opinions or their use.

The indexes shown are unmanaged and not available for direct investment. Past performance is not a guarantee of future results. The Morningstar name and logo are registered marks of Morningstar, Inc.