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Health Screening for Dividend Payers
The Distance to Default measure helps Morningstar indexes identify companies with at-risk dividends.

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Though dividend-paying stocks are sometimes dismissed as slow-growth companies appealing only to income-seeking investors, they have quietly assembled an enviable track record of long-term total returns. Why? First, companies that can afford to return cash to shareholders tend to be financially stronger than average. Second, committing to a regular payout forces corporate management to take a more disciplined approach to capital allocation. Third, consistent dividends breed shareholder loyalty.

But equity income investing is no free lunch. History is riddled with examples of long-time payers that ran into trouble — experiencing financial distress, dividend cuts or suspensions, share price depreciation, and even bankruptcy. The term "dividend trap" refers to a company that lures investors with an impressive, but ultimately unsustainable payout. In the words of Raymond DeVoe: "More money has been lost reaching for yield than at the point of a gun."

Equity income investors would be wise to take a selective approach. Income should not be prioritized over total return. Nor should dividend payers be identified exclusively through backward-looking screens. Careful consideration should be paid to fundamental factors that signal trouble ahead.

One of these is financial health. 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 debt holders.

"Distance to Default" is a quantitative measure of financial health employed as a screen by several Morningstar indexes. As the name implies, it gauges the likelihood that a company's assets will fall below the value of its debt. For companies in a downward spiral, cutting or suspending dividends can be management's first lifeline.

Key Take-aways:
► This paper demonstrates that Distance to Default effectively predicts dividend sustainability.
► We cite several recent examples of companies, spanning sectors and regions, that failed Morningstar indexes' Distance to Default screen, then suffered dividend cuts and share price declines.

Distance to Default: A Measure of Financial Health

Morningstar's Distance to Default measure ranks companies on likelihood of financial distress.[1] The metric uses option-pricing theory and evaluates 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.

What's unique about Distance to Default is that it also incorporates market-related information. Markets are often a leading indicator of financial distress. According to Morningstar's Head of Research Haywood Kelly, "In many cases, the stock price will reflect deterioration in a company's credit strength well before it shows up in financial statements of analyst forecasts."[2] Therefore, a company's equity value, most importantly the volatility of a company's equity, is considered.

Exhibit 1 depicts the dynamics at play in Distance to Default. The starting point is the total market value of a company's assets. Based on the volatility of the firm's equity in the past, and its asset value drift, a range of possible future values can be estimated. This distribution is the bell-shaped curve protruding to the right. The horizontal line labelled "Default Barrier" is the level of the company's liabilities. If the value of assets falls below this line, the company becomes insolvent. The higher the volatility of asset values, the greater the portion of the probability distribution that falls below the horizontal default barrier. Similarly, the higher a company's liabilities, the higher the default barrier and the greater the portion of the distribution that falls beneath it.

Exhibit 1 Distance to Default
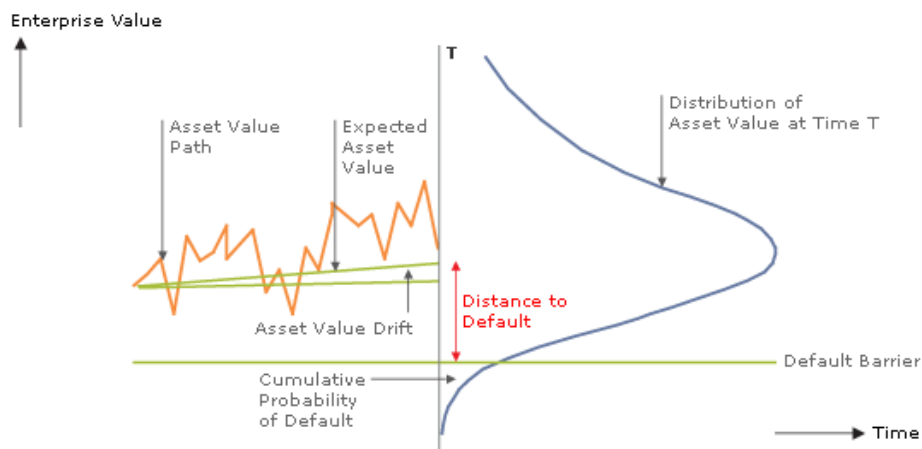
Source: Morningstar Credit Research 2009. For Illustrative Purposes Only.

Morningstar uses Distance to Default as a screen in several dividend-focused indexes. Companies are typically compared with peers on the basis of Distance to Default score, and companies that fall under a

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1 A full discussion of Morningstar Indexes' Distance to Default methodology is available at:
   https://indexes.morningstar.com/resources/PDF/Methodology%20Documents/Morningstar%20Indexes%20DtD%20Methodology.pdf

2 See: https://www.morningstar.com/articles/318639/eleven-companies-that-score-poorly-on-distance-to-default

given threshold are ineligible for consideration. Because of the dynamic nature of the Distance to Default score, indexes that use the screen must reconstitute (reset membership) frequently.
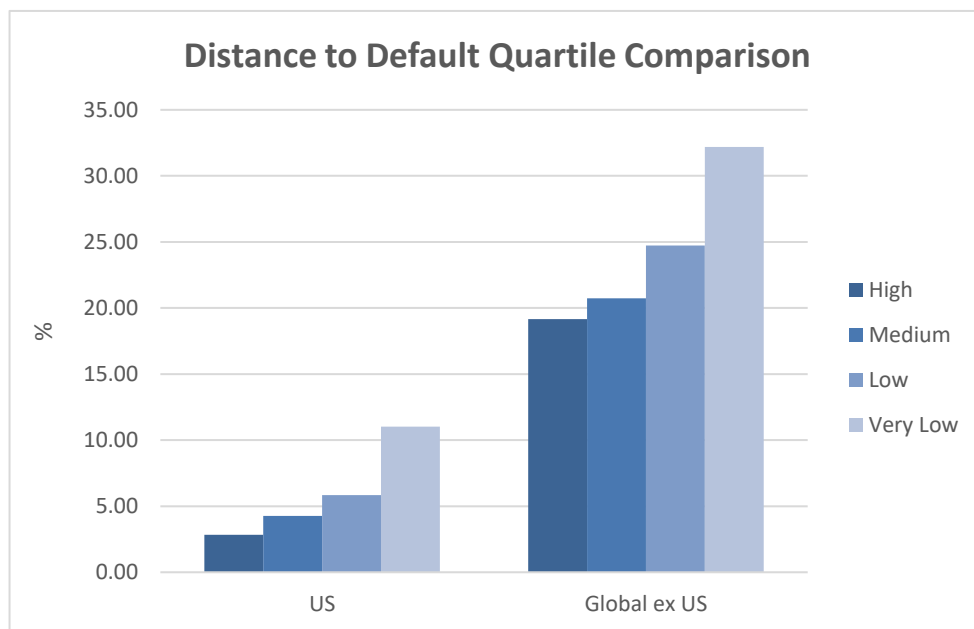
Screening Out Dividend Cutters

As displayed in Exhibit 2, the Distance to Default measure is an effective predictor of dividend cuts. Dividing the universe of dividend payers into equal bands (quartiles) by their Distance to Default scores, we looked at whether the company went on to cut its dividend. Dividend cuts are defined differently depending on region. For the United States and Canada, where dividends are paid regularly, we calculate the indicated dividend per share by annualizing the latest dividend paid by the company. If the company decreases its dividend per share any time within a one-year period, we consider it to be a dividend cut. The time period studied was Nov. 30, 2005, to Nov. 30, 2019.

For the global equity universe, excluding North America, we determine whether a dividend was cut by comparing adjoining fiscal year-end dividend per share figures over a multiyear period. If the company decreased its dividend per share year over year, we consider it to be a cut.

In absolute terms, dividend cuts are more frequent outside of North America. The dividend commitment is strongest in the U.S. and Canada. In other markets, dividends are often paid out opportunistically when the company has excess cash on hand. This is especially true in emerging markets.

According to Exhibit 2, companies with low likelihoods of default are the most likely to sustain dividends.

Exhibit 2 Companies With Better Distance to Default Scores Are Less Likely to Cut Their Dividends

Source: Morningstar Indexes. Time period for study: Nov. 30, 2005-Nov. 30, 2019.

Case Studies of Dividend Cutters Screened Out by Distance to Default

We have included several recent case studies below to bring the aggregate dividend cut data displayed above to life. These companies failed Morningstar's Distance to Default screen at the time of index reconstitution because of poor financial health. All went on to cut their dividends and suffer share price declines.

► Kraft Heinz is a household name around the world for its food and beverage products. Kraft and Heinz combined in mid-2015, after Warren Buffett's Berkshire Hathaway teamed up with Brazilian private equity firm 3G Capital to buy Heinz. 3G's management pursued aggressive cost-cutting in the name of improved efficiency. This boosted margins and sent the share price climbing. But cost-cutting eventually ran its course. Underinvestment positioned the company poorly for the long term. Like many traditional consumer durable companies, Kraft Heinz is struggling to adapt to changing customer tastes. Exposure to the growing market for healthier, organic options was lacking, and an attempt to acquire Unilever fell through. Kraft Heinz lured in many equity income investors in 2018 with a 4-5% dividend yield, but the company failed Morningstar's Distance to Default screens for index reconstitutions in June 2018 and September 2018. Its fourth-quarter 2018 earnings announcement detailed a profit contraction and a reduction in its quarterly dividend from $0.625 to $0.40 per share. Kraft Heinz saw a share price decline of 41% in 2018 and 22% in 2019.

► General Electric traces its lineage to inventor Thomas Edison and legendary CEO Jack Welch; it once held the title as the most valuable publicly traded U.S. company. An industrial conglomerate that had a significant financial-services arm, GE ran into trouble during the 2008 financial crisis, then struggled to navigate a changing market for power and electricity. The firm continues to face lingering liabilities related to GE Capital, even after its divestiture. GE Power, the firm's largest segment by revenue, has struggled with several challenges, including overcapacity in the industry, pricing pressures, and the rise of renewable energy. With power revenue plunging, GE was forced to take a $22 billion write-down. Morningstar's analysts described its situation as "cash burn." GE has long been excluded from Morningstar dividend indexes because of its Distance to Default score, though it did re-enter at the June 2017 reconstitution, only to be removed at the September 2017 reconstitution. In November 2017, GE reduced its quarterly dividend by 50% to $0.12 per share. Then in October 2018, GE announced it would slash its quarterly dividend to $0.01 per share. GE's saw a 27% share price decline in the fourth quarter of 2017, then lost a further 54% of its value in 2018.

► Vodafone is one of the world's largest telecom providers, with 275 million wireless customers globally and an extensive fixed-line network. Thanks to years of acquisitions, asset sales, and partnerships, Morningstar Equity Research describes Vodafone as being in a "constant state of restructuring." When Vodafone acquired Kabel Deutschland in 2013 and Spain's Ono in 2014, its debt load increased substantially. Project Spring, Vodafone's network upgrade initiative that followed the sale of Verizon Wireless, required significant capital expenditure, as did spectrum purchases. Weakness in Spain and Italy pressured Vodafone's revenue in 2017-18, as did currency fluctuations. With net debt climbing, Vodafone decided to acquire Liberty Global's German and Eastern European operations, raising the prospect of even more leverage on the balance sheet. Vodafone's dividend, which it had increased every year since 1998, was now consuming more than 90% of free cash flow. Vodafone has consistently failed

Morningstar's Distance to Default screens. In May 2019, Vodafone cut its dividend by 40%, sending its share price plummeting, before a late 2019 recovery.

▶ Anheuser-Busch InBev was created through the 2008 merger of Belgium-based InBev and U.S.-based Anheuser-Busch, engineered by Brazilian private equity firm 3G Capital. AB InBev has become the largest brewer in the world and one of the top five consumer product companies by earnings. Acquisitions have been rampant in recent years, as Grupo Modelo, Oriental Brewery, and SABMiller have all come into the group's fold. A global platform allows the company to muscle out rivals, realize economies of scale, and expand brands into new markets. Developing markets, Africa in particular, are considered huge growth opportunities for brewers, as consumers upgrade their beer choices. But the company's aggressive strategy has challenged financial health. AB InBev took on significant leverage for the SABMiller acquisition in 2016. At its peak, the company's net debt/EBITDA ratio was 5 times, compared to the average consumer staples company at roughly 3 times. It finished 2018 with $110 billion in debt, exacerbated by emerging-markets currency declines. The company failed Morningstar's Distance to Default screen in June 2018. In the fourth quarter of 2018, the company cut its dividend payout by half and suffered a 22% share price decline.

▶ BMW owns some of the most well-regarded global automotive brands—its eponymous German luxury vehicles, as well as Mini and Rolls-Royce. Though BMW consistently produces quality vehicles that command premium pricing, it operates in a competitive, cyclical, capital-intensive business. The company has had to spend to implement new technologies, such as powertrain electrification and autonomous driving. Manufacturing costs have increased as a result of stricter emissions requirements, and provisions have been taken for a potential European Commission fine for diesel equipment collusion. Though BMW's revenue growth has been strong, it faces a cyclical downturn that has affected other automakers, such as Daimler, Ford, and GM. BMW has historically paid an annual dividend, though it tends to lower the rate when cash flows fall. The company has failed Morningstar's Distance to Default screen on several occasions, including in June 2018. In March 2019, BMW announced a decline in profits and a dividend cut to EUR 3.50 from EUR 4. BMW's share price fell more than 8% from March 2019 through the end of January 2020.

▶ Telstra is Australia's largest telecommunications provider, with significant or dominant market share in voice, mobile, data, and Internet, across customer segments. Telstra also owns significant telecom infrastructure assets, including optical fiber cable. The company is in transition due to the ongoing shift from fixed line to mobile and Australia's National Broadband Network, a government-led initiative to extend telecommunication and network services to all Australian households. As the NBN rolls out, Telstra's traditional copper and cable networks are being decommissioned, albeit with compensation payments. This has left Telstra to focus on mobile, network applications, and digital media. It faces intense competition in some of these areas, and earnings and margins have been under pressure, as providers compete on price. Telstra estimates that from 2016 through 2019, NBN cost it AUD 1.7 billion in earnings. It has launched a substantial cost-cutting and restructuring program. Morningstar's Distance to Default screen has blocked the company from index inclusion. Telstra has cut its dividend every year since 2016 in an effort to lower its payout ratio to a more sustainable level. Telstra's share price has fallen nearly 20% from the beginning of 2016 through the end of 2019.

► StarHub is one of three main telecommunications providers in Singapore, spanning wireless, fixed line, and pay television. The business faces two key challenges: increased competition for mobile and the secular decline of pay TV. Representing nearly half its revenue, mobile has historically been a profitable business for StarHub. But the company has been losing mobile market share in recent years, especially to smaller competitor M1. More intense competition has emerged, with some providers offering free months or even a free year of service to win customers. Meanwhile, StarHub's pay-TV business is in decline. The company reported 347,000 subscribers in September 2019, down from a peak of 545,000 customers in 2015. Competition from SingTel, Netflix, and other outlets has eroded StarHub's ability to bundle its services, which has also hurt the mobile division. StarHub is pivoting to focus on corporate IT services, which has real growth potential, but falling profits and a deteriorating balance sheet prompted workforce reductions and cost-cutting across the business. The company has consistently failed Morningstar's Distance to Default screen. StarHub's dividend payment, which stood at SGD 0.20 from 2010 to 2016 fell to SGD 0.16 in 2017 and 2018 and to SGD 0.09 in 2019. StarHub's share price declined nearly 50% from the beginning of 2016 to through the end of 2019.

Dividends for Total Return

Financial health is a critical consideration for equity income investors. Buying high-yielding shares without regard for the company's ability to sustain its dividend payment is a risky proposition. From financial services and housing-related industries in 2008-09 to commodities and materials in 2015, to a wide array of companies challenged for more idiosyncratic reasons, history provides ample cautionary tales of dividend traps. As a dynamic, market-driven measure of financial health, Distance to Default is an effective screen to help investors avoid balance sheet deterioration. Investors can use it to identify companies whose dividends are at risk. Data from the past 15 years shows that companies with better Distance to Default scores are likelier to sustain their dividends. It has flagged a number of companies spanning sector and geography that have gone on to cut their dividends. As a group, dividend-paying stocks remain good investments, but investors must remember to never prioritize yield at the expense of long-term total return. M

About Morningstar, Inc.

Morningstar, Inc. is a leading provider of independent investment research in North America, Europe, Australia, and Asia. The company offers an extensive line of products and services for individual investors, financial advisors, asset managers, retirement plan providers and sponsors, and institutional investors in the private capital markets. Morningstar provides data and research on a wide range of investment offerings, including managed investment products, publicly listed companies, private capital markets, and real-time global market data. The company has operations in 27 countries.

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