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Using ESG to Enhance Fixed-Income Returns: The Case of Inherent Group

by Nikhil Mirchandani and Chelsea Rossetti, Inherent Group*

At Inherent Group we aim to earn above-market risk-adjusted returns in businesses that are environmentally and socially as well as financially sustainable. We apply environmental, social, and governance (ESG) analysis throughout every stage of our investment process across the entire corporate capital structure. In our experience, this approach has produced differentiated insights into investment opportunities across a variety of industries, geographies, and security types. Investment managers have traditionally overlooked ESG considerations in credit markets, but we have found that such insights—into the effects of externalities such as climate change, environmental impacts of production, and transparency of sales practices, for example—improve our assessments of credit risk and reward.

Credit markets are a major, if not the primary, driver of a company's cost of capital. Unlike a company's cost of equity, its cost of debt can usually be readily observed and estimated simply by using market prices to back out the trading yields on its bonds or loans. These prices are effectively set by the credit "spreads" that buy-side investors deem sufficient compensation for the probabilities of loss in each given security. Such spreads, when added to the prevailing level of risk-free interest rates, provide a reliable estimate of the cost of debt.

Research that provides a basis for conviction about the two main drivers of cumulative loss—default probabilities and losses in the event of default—is critical to success in credit investing. Estimating credit risk to produce fundamentally driven targets for spreads requires understanding how these two drivers are likely to vary in response to different scenarios, both macroeconomic and borrower-specific. Ultimately, all successful credit investors work hard to find situations in which their judgments of loss prospects differ materially from those reflected in current market prices. With the aim of detecting such mispricing, investors typically immerse themselves in intensive analysis of business operating fundamentals, industry structures, applicable bankruptcy law, legal documentation, and incentives in different parts of various capital structures. In our experience, the willingness and ability to conduct this kind of fundamental analysis are "table stakes" for active management in credit markets.

Nevertheless, in our view, otherwise diligent and thoughtful credit investors are often missing one of the most insightful analytical tools available to them by ignoring or giving cursory consideration to ESG factors.[1] Indeed, a considerable and rapidly growing body of studies by both academic and Wall Street sources supports the view that companies that outper-

*The views and assessments expressed in this article are largely or entirely those of the personnel of Inherent Group, LP ("Inherent") as of the time that this article was prepared and are subject to change. They may prove to be incorrect in whole or in part. The investment illustrations described in this article are included solely to illustrate the manner in which certain aspects of Inherent's ESG-focused investment strategy may be implemented. Such investments are not representative of all of the investments made or anticipated to be made by Inherent on behalf of its clients. Further, such investment illustrations, and the other information and opinions in this article, are not and do not purport to be investment advice. Operational, industry, sector, and market information contained herein was compiled from sources that Inherent believes to be reliable. Inherent makes no representations or warranties as to the accuracy or completeness of such information, nor of the other information or opinions expressed in this article. This is not an offer of investment advisory services.

1 All of the major credit ratings agencies have signed onto the Principles for Responsible Investment statement that ESG factors can weigh on default probability, and consider such factors in their ratings, https://corpgov.law.harvard.edu/2020/03/01/esg-performance-and-the-credit-markets/. However, according to Barclays, only 34% of US High Yield and 90% of US Investment Grade corporate issuers are covered by both MSCI and Sustainalytics. Barclays Research, "ESG Investing in Credit: A Broader and Deeper Look," October 2018.

form on ESG issues tend to outperform as credit investments over time.[2]

Moreover, the recent growth of the "green" or "sustainability" bond market has begun to buttress the findings of these backward-looking studies with real-time evidence. In two highly visible cases, large issuers such as Google and Visa broke records for low all-in issuance yields in August of this year by linking debt issuance to environmentally friendly projects.[3] Google issued $5.75 billion in sustainability bonds, the largest sustainability or green bond by any company in history. Although a number of companies have issued green bonds, which are directed solely to environmental uses, the proceeds from sustainability bonds support investment in addressing both environmental problems and other social initiatives.[4]

In fairness to most market participants, converting theory into practice in marrying ESG analysis with credit investing runs into at least two major challenges. First, how does one define and measure ESG? Different ESG rating firms, to say nothing of different investment managers or companies themselves, have a wide variety of concerns and approaches assessing the ESG performance of companies and industries. Second, where does one find the data to use when evaluating ESG concerns and performance? Even if credit managers can agree on a set of uniform ESG criteria to apply across issuers, data availability and integrity are often lacking for leveraged companies, which tend to be smaller and are often privately held.[5] Faced with these challenges, the temptation to ignore ESG considerations, employ simplistic negative screens, or outsource thinking to a ratings firm is understandable.

Nevertheless, at Inherent we believe the hard work of bottom-up, internally driven ESG analysis is a worthwhile pursuit. We make it central to our idea sourcing, underwriting, and dialogue with issuers. We find that such practices, however labor-intensive, end up providing valuable investment insights and drive long-term value creation for our partners. In the pages that follow, we walk the reader through both our process and a few examples of our own ESG-informed credit investments.

Applying ESG to Leveraged Credit Markets: Inherent's Approach

Sourcing. The proliferation of definitions of ESG in recent years has created major confusion about the size of the opportunity set in credit markets. And the growth of the green and sustainable bond market has no doubt contributed to this confusion by making sensible people wonder if all bond or loan proceeds must be specifically earmarked for environmental or social projects to qualify as ESG-eligible.

Our core belief is more simple, and perhaps more useful for practitioners: ESG considerations can and should be a material factor when assessing investment merits in all corporate credit analysis. Assessing ESG risks and opportunities can and will lead to negative conclusions about some companies and positive ones about others, and this is true of companies in all industries. While we source large portions of our portfolio on the basis of deep industry analysis of companies aligned with ESG megatrends such as decarbonization and quality healthcare, we also source investments using traditional financial screens that help us identify forced or motivated selling in credit markets, evaluating the resulting investment opportunities using our ESG framework to determine suitability thereafter. The opportunity set is broad; when using both of these sourcing approaches, we ask ourselves a similar set of questions throughout the underwriting process.

Underwriting. Inherent has developed a proprietary ESG scoring framework to standardize its comparison of ESG attributes across companies and industries at the underwriting stage. We try to use it when evaluating any material new potential investment. This framework grew out of an iterative, self-correcting process of attempting to identify and track the most material sustainability factors for our investments over time. While this framework acknowledges and borrows some of the good work of ratings providers and standards boards in the industry, it also tries to remedy some of their shortcomings. Perhaps most important are the tendencies of ESG ratings firms to emphasize what is easily quantified rather than what is financially material and to give priority to self-disclosed data, leaving gaps of coverage in many leveraged issuers. Though our own approach to these issues is by no means without flaws, we find that its standardization and codification provide a valuable analytical starting point.

As summarized in Figure 1, our framework focuses on the following five ESG dimensions: governance, culture, climate risk, other environmental and social risks, and environmental and social opportunities. For each of these factors, we assess and assign values to a number of inputs that we have found to be indicative of performance as well as broadly comparable across companies and industries. We use the four-point scale to represent quartiles

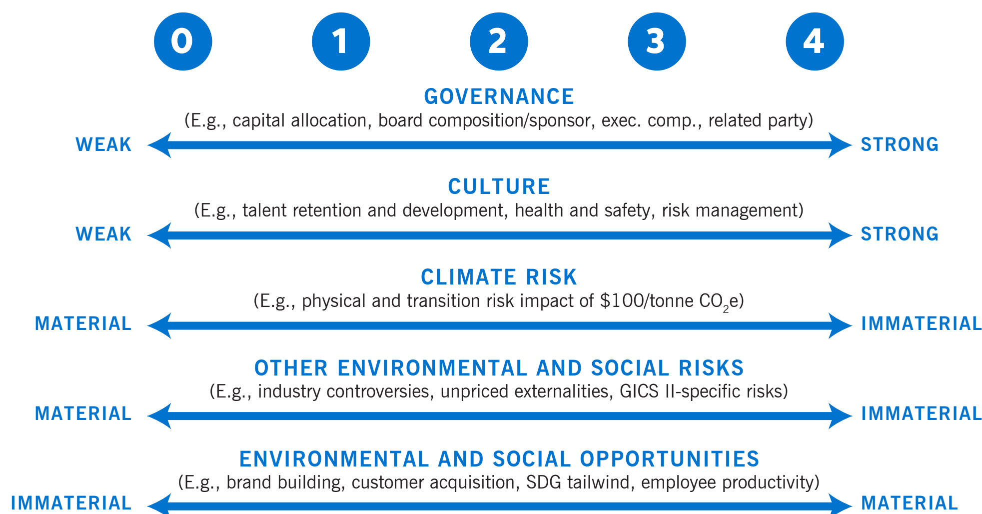
2 See, for example: Ge, W. & Liu, M. (2015), "Corporate social responsibility and the cost of corporate bonds," *Journal of Accounting and Public Policy*, 34(6), 597. Also, Pereira, P., Cortez, M. C., and Silva, F. (2019), "Socially responsible investing and the performance of Eurozone corporate bond portfolios," *Corporate Social Responsibility and Environmental Management*, 26(6), 1407-1422. https://doi.org/10.1002/csr.1756.

3 https://ssir.org/articles/entry/making_a_better_business_case_for_esg.

4 https://blog.google/alphabet/alphabet-issues-sustainability-bonds-support-environmental-and-social-initiatives/.

5 See, for example: Goldman Sachs Research. GS Sustain: The PM's Guide to the ESG Revolution dated July 28, 2020. "Although available ESG data has proliferated dramatically since our original PM's Guide report in 2017 (we estimate a doubling of available data points), corporate disclosures remain dominated by vague and difficult-to-compare policy pronouncements (70% of total), while 54% of numeric metrics still have disclosure rates below 20%. Even where data is available, a lack of comparability, timeliness, assurance and depth persists."

Figure 1
Inherent Group ESG Framework



across the corporate universe such that a score of 2 for each factor is the median for that universe. Although this may sound overly precise, and we try to quantify everything to facilitate comparison, the scoring process does not fit neatly into predetermined rote weightings and rubrics. Instead it relies heavily on judgment and experience to make distinctions, weigh competing signals from different inputs, and, ultimately, arrive at our composite scores. Each person on the investment team is responsible for scoring the issuers under evaluation in his or her sectors, such that we benefit from each person's cumulative industry experience in making assessments. We then review and test one another's scores regularly in our full-team investment discussions.

Our experience has shown that use of this framework across many issuers has increased the overall rigor of our investment process in several ways. It provides a standardized lexicon and common reference point for our investment team to discuss and rank issuers. We discuss the output of our internal scoring in the context of more traditional financial quantitative and qualitative drivers of investment risk-reward and position sizing. Our investment discussions tend to move seamlessly from analysis of, for instance, the predictability of a company's margins to considerations such as its preparation for a lower-carbon future and the effectiveness of its internal human capital development. Ultimately, in all instances, we are looking for mispriced perceived externalities that could someday be internalized and affect the long-term prospects and creditworthiness of a business. This is what ESG discussion, at its best, can consistently produce.

Monitoring and Re-Underwriting. Regular review, reporting, and tracking of the scores using our framework give us a sense of relative materiality across companies and industries in addition to ESG trajectory and momentum. We believe that, just as a turn in operating performance of a business can herald some of the most attractive future returns for investors, so too can an ESG inflection point reveal a change in future business prospects that markets will eventually recognize. Using a standard scoreboard and revisiting it regularly helps us identify potential turning points. By contrast, more passive and cursory ESG approaches, particularly ESG screens, tend to view issuers as largely static, missing these valuable signals.

Furthermore, applying our framework forces our entire investment team to ask and seek answers to material ESG questions about a business, even when data is not readily available. Sometimes that requires us to estimate an important input by triangulating data from comparable companies that provide better disclosure. In many cases, it means asking corporate management teams directly for input. We find that most management teams are open to such a dialogue and willing to point us in the right direction, even in some cases connecting us with their internal sustainability departments or other executives. What's more, management teams often tell us that they rarely receive—and are pleasantly surprised by—investor inquiries about ESG issues. Simply taking the extra step of initiating a dialogue on an environmental or social topic can end up deepening a relationship. Such conversations often give us insights into culture and operations that are beyond the scope of our initial inquiry, and may help inform our overall asessments of different management teams.

Portfolio Construction and Management. We believe there are two primary drivers of credit returns through

economic cycles. First, and most important, credit selection is an art whose primary principle is loss avoidance. The fixed upside in credit investing generally produces negatively asymmetric risk-reward investment opportunities. For this reason, a focus on capital preservation and downside protection is paramount. In addition, probability assessments in investment underwriting are inherently subjective. This makes it very important to avoid risks with high magnitude—those that could cause a sharp drop in the real or perceived creditworthiness of a business—even when the probability of those risks materializing appears remote from today's vantage point.

The second key driver of portfolio-level returns is the ability to identify select credits, usually few and far between, that have the potential to generate outsized upside returns without compromising the capital preservation focus. These can take the form of securities with meaningful spread-tightening potential, which can be amplified by duration, or in the form of stressed and distressed debt situations where investors get paid to take "process" risk while restructuring the operations and capital structure of a business.

We find that making ESG central to our investment process helps reveal candidates for improving portfolio performance on both the downside and upside. It can shed light on both major risks in superficially appealing credit investments and on upside revaluation drivers that traditional analyses are likely to overlook. To this end, we generally avoid taking a long position in any credit with an overall ESG score that is below median (less than 2.0) in our scoring framework; at the same time, we tend to look favorably on top quartile overall performance and on positive score momentum in our portfolio sizing decisions.

Next, we illustrate these principles in practice using three specific credit investments we have made at Inherent Group. Whereas the first two are premised on profiting by *shorting* the credit of below-average ESG companies that many credit managers viewed as attractive long investments, the third shows how ESG can be used to reveal significant upside in credit markets that becomes the rationale for taking long positions.

Short Credit: Social Concerns Foreshadow Liabilities and Bankruptcy Risk

The subject of the first of our three case study investments is a public pharmaceutical company that manufactures both specialty branded and generic drugs. The branded drugs primarily target rare autoimmune diseases while the generic drugs include acetaminophen, opioids, and other controlled substances.

The company initially came to our attention in 2018 when it showed up both in our thematic work on ESG winners and losers in the U.S. healthcare system and in our more traditional financial screens for discounted cash price bond instruments with higher-than-average credit spreads. At that time, several credit investors appeared to be betting on the company's high free cash flow generation and its potential ability to return value to creditors from asset sales. But we had a different take, thanks to our continuing long-term work to develop our thesis that the unsustainable cost trajectory of the U.S. healthcare system required a transition to value-based care. In our view, this transition was likely to undermine the economics of rent-seeking businesses, including high-priced pharmaceutical manufacturers and opioid manufacturers like the company in question. Our ESG lens was particularly helpful in weighing these competing threats and investment merits.

In our initial underwriting the company displayed overwhelmingly poor ESG performance that significantly outweighed its seemingly positive financial attributes. In particular, its poor scoring in our assessment of its social and governance dimensions highlighted several major risks.

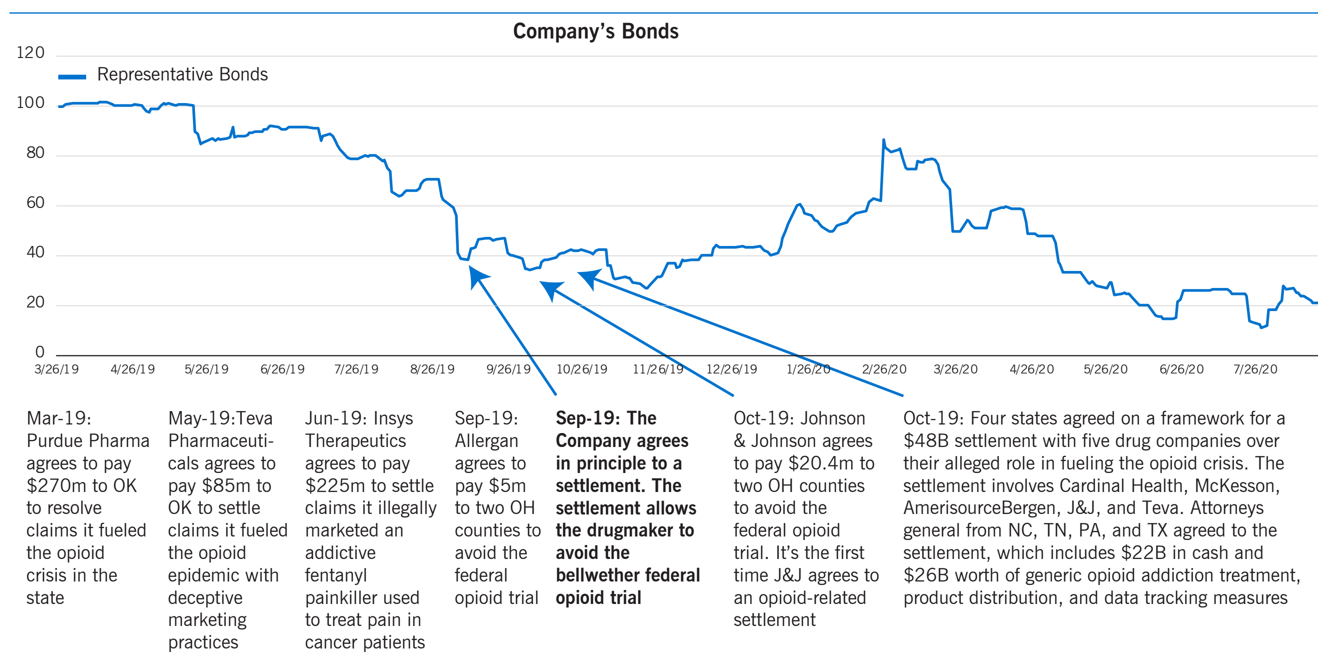
First, the company had a troubled history with pricing for its largest revenue generator, an off-patent specialty drug with niche applications that contributed over 40% of revenues.[6] It acquired the drug from a company with a history of significant price hikes and then proceeded to increase prices further, serving as a large driver of a 1,000x price increase per vial over 15 years.[7] Further, deeper research revealed the drug's limited efficacy and anomalies in its distribution. With the majority of this drug's revenues from government payors and very high product profit margins, we believed that an eventual reckoning with this ESG risk was likely, if not inevitable, and that the impact of any material change in pricing would sharply reduce its bottom-line cash flows and overall firm value, including the price of its outstanding bonds.

Second, the company's significant role in opioid manufacturing and distribution also opened it up to potential liabilities. This company has been one of the U.S.'s largest manufacturers of generic oxycodone and hydrocodone and has paid significant fines for failure to report suspicious orders to the DEA. Our broader work in the healthcare space had led us to view the opioid epidemic as an enormous social problem—and one that was frequently enabled by for-profit companies in the drug value chain. Indeed, near the end of 2017, witnesses from the U.S. Department of Health and Human Services testified that, in 2016, over 11 million Americans misused prescription opioids, nearly one million used heroin, and 2.1 million had an opioid use disorder attributable to prescription opioids or

6 Company filings; Inherent Group analysis.

7 Ibid.

Figure 2
Select Pharmaceutical Company's Bond Price



Source: Bloomberg and Inherent analysis.
Note: The above represents an indicative unsecured bond as a proxy for pricing of the credit.

heroin.[8] Although the apportionment of liabilities to private companies remained small compared to the company's enterprise value at the time of our initial work, our analysis suggested that a more appropriate, and politically likely, assignment of the costs associated with this social externality would translate into a far greater liability over time.

This confluence of social concerns about drug pricing and opioids with our negative assessment of the company's culture and governance led us to assign this company an overall bottom quartile rating in our ESG scoring framework. While we did not ascribe precise probabilities or timing to these ESG risks or translate them into clear-and-present financial impacts, we believed that, with the company's bond prices in the 80s and credit spreads of 5%-7% annually, the credit markets were underpricing significantly both the probability of default and losses in the event of a default. Bullish investors, by contrast, were effectively betting on the company exercising its option to spin off its generic division as a shield against opioid liabilities and were focused instead on the deleveraging trajectory of the enterprise premised on its (past) cash-generating capacity. These analyses, though partly valid, missed the significant risk of a negative step change in creditworthiness.

After initiating a short position in the company's bonds, some of our concerns about the company proved well founded. The company's bond prices dropped, reflecting growing recognition of its ESG issues when Oklahoma pursued the first case against a drug manufacturer for the opioid crisis. J&J was ordered to pay $572 million, foreshadowing what might come in the 2,000 additional lawsuits already then in motion.[9] At the same time, distributors McKesson, Cardinal Health, and AmerisourceBergen proposed paying $10 billion to settle claims that they helped fuel the opioid epidemic.[10] Then, in September 2019, Purdue Pharma reached an agreement with a majority of states involved in litigation against the company over its role in the U.S. opioid crisis and agreed to pay between $10 and $12 billion to settle, forcing Purdue into bankruptcy.[11] The company's securities traded sharply lower in sympathy.

Figure 2 shows the performance of a representative tranche of the company's bonds.

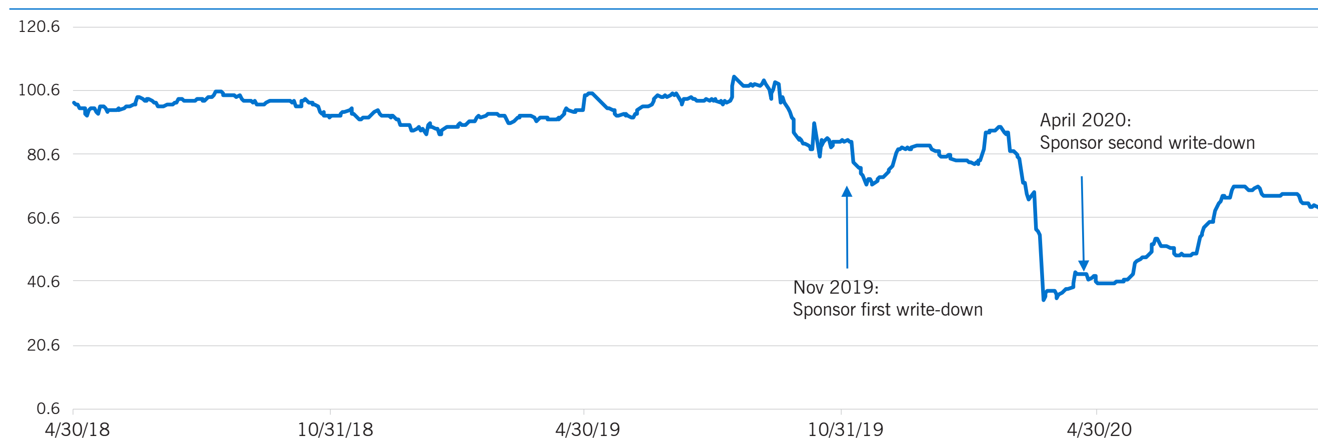
8 https://www.fda.gov/news-events/congressional-testimony/federal-efforts-combat-opioid-crisis-status-update-cara-and-other-initiatives-10242017-10242017.

9 https://www.nytimes.com/2019/08/26/health/oklahoma-opioids-johnson-and-johnson.html.

10 https://www.bloomberg.com/news/articles/2019-08-06/opioid-distributors-propose-10-billion-to-end-state-lawsuits.

11 https://www.biospace.com/article/purdue-pharma-files-for-bankruptcy-as-10-12-billion-opioid-settlement-moves-forward/.

Figure 3
Commercial Real Estate Company's Bond Prices



Source: Bloomberg; Inherent analysis.

Short Credit Case Two: Governance Concerns Call Valuation into Question

This commercial real estate company came to Inherent's attention in the summer of 2019 as the company was preparing for an initial public offering in the fall. The company subleases short-term office space in properties mainly leased from landlords on long-term rental agreements. It had raised a number of private equity rounds over the prior ten years; and between 2017 and its August 2019 S-1, its largest investor injected $10.65 billion of capital in 2019 carrying a $47 billion valuation.[12]

A year earlier, in April 2018, the company placed $702 million of high yield debt at 7.875% following offerings by Uber and Netflix in prior weeks.[13] These bonds were trading just below par when we reviewed the credit in the summer of 2019. Other investors found this to be an attractive credit investment because of the potential support of its largest and well-capitalized investor, the low implied loan-to-value, and the belief that an IPO could result in a make-whole payment substantially above par.[14]

The company filed its S-1 in August 2019 with the intent of raising approximately $3 billion of public equity to fund near-term liquidity and growth needs. The company also secured commitments for a $6 billion credit facility contingent upon the IPO proceeds that would likely refinance the bonds.[15] As scrutiny of the company's most recent private valuation of $47 billion—which some estimated at closer to $20 billion[16]—and governance structure mounted, the ability to raise this equity and to secure the credit facility came under pressure.

Inherent was skeptical about the company's profitability prospects generally and, more specifically, about its business practice of matching long-term leases to short-term contracts with customers. Inherent weighed these concerns mainly against the possibility of intervention by the company's loyal and deep-pocketed sponsor and lead investor.

But in the company's filing of its S-1, we identified further business practices that concerned us:

• *Conflicts of interest and related-party dealings:* shortly before the planned IPO, the company rebranded itself, paying its CEO $5.9 million for rights to use one of the words he had trademarked through an LLC of which he was a managing member.[17] The CEO also leased buildings he partly owned to the company.[18] What's more, ahead of the IPO, the WSJ reported that the CEO had liquidated $700 million of his holdings of the company's stock.[19]

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12 https://www.sec.gov/Archives/edgar/data/1533523/000119312519220499/.d781982ds1.htm; https://www.cnbc.com/2019/08/14/wework-releases-s-1-filing-for-ipo.html.

13 https://www.bloomberg.com/news/articles/2019-09-10/wework-bonds-drop-below-par-for-first-time-since-ipo-filing-k0dutcn0.

14 The theoretical make-whole payment could substantially exceed original par value, driven by the net present value calculation on its contractual coupons at a lower discount rate, added to the principal.

15 https://www.reuters.com/article/wework-ipodebt/wework-obtains-commitments-for-us6bn-ipo-linked-debt-idUSL2N2511HA.

16 https://www.smartkarma.com/insights/initial-thoughts-on-wework-s-ipo-filing-aren-t-supportive-of-a-higher-valuation.

17 https://www.wsj.com/articles/this-is-not-the-way-everybody-behaves-how-adam-neumanns-over-the-top-style-built-wework-11568823827.

18 https://www.wsj.com/articles/weworks-ceo-makes-millions-as-landlord-to-we-work-11547640000.

19 https://www.wsj.com/articles/wework-co-founder-has-cashed-out-at-least-700-million-from-the-company-11563481395.

• *Multiple share classes:* the company created C shares with 20x the voting rights of A shares to maintain the CEO's voting control—twice as much voting power per share as the A shares issued by comparable companies—which also had the effect of shifting the tax burden from the CEO to outside shareholders.[20]

• *Lack of Board diversity*: at a time when all S&P 500 companies had at least one female board member, this company planned to go public with an all-male seven-member board.[21]

After receiving market pushback in September on its business model, excessive valuation, weak leadership, and corporate governance, the company postponed its IPO until the end of 2019. A week later the company's CEO stepped down. Shortly thereafter, the company's IPO was pulled and rescue financing from its lead investor was arranged. As shown in Figure 3, the company's high-yield bonds traded down to the low 70s in November 2019 as that same lead investor reported $9.2 billion in write-downs on its investment, an amount equal to roughly 90% of its full $10.3 billion investment in the venture, and traded lower again when the investor reported further write-downs in April 2020.

Using ESG to Find Uplift (and a Long Position) in the California Utilities

In some cases, ESG underwriting and sourcing leads to insights about the upside that markets appear to be ignoring, about unrecognized and underpriced *positive externalities* that could provide the basis for growth in enterprise value. One notable example arose from the recent bankruptcy of a California-based utility. This example also highlights the importance of periodic reevaluation of ESG factors to identify potential inflection points in issuers' ESG momentum and the potential for financial distress and reorganization to bring about a corporate reset that drives these inflections.

The utility in question is a regulated energy company that serves 16 million customers in Northern and Central California. Its potential liabilities from the 2017 and 2018 Northern California wildfires caused the utility and its parent to file for Chapter 11 bankruptcy protection in January 2019.[22]

Inherent first considered taking a long position in the company's bonds and its common stock as early as 2017, as part of our thematic analysis of winners and losers from decarbonization. Our climate analysis generally, and with respect to utilities specifically, goes one step further than that of most investors we have encountered in the market. Besides looking at emissions intensity (usually, scope 1 and scope 2 CO_2-equivalent emissions per unit of revenue), we try to assess and quantify the impact of decarbonization throughout an enterprise's value chain. As a proxy, we ask ourselves how each company would fare if carbon emissions were immediately taxed at $100 per tonne. This thought exercise provides insight into the quantitative impact of potential regulation on carbon pricing and into the threats and opportunities facing different businesses from bearing or managing these costs.

For a number of U.S.-based utilities, our analysis suggests that the net result of internalizing carbon costs would actually be faster earnings growth as they accelerate capital investments in renewables. Investors who simply evaluate emissions intensity are likely to miss this possibility, and might even draw the opposite conclusion and decide to avoid the entire sector.

In 2017, on the basis of our ESG-informed assessment, the major California utilities including this one appeared particularly well positioned for this rate-base-growth tailwind from renewable investment. California's nation-leading climate objectives (shown in Figure 4) were expected to translate into significant spending in areas such as clean power generation, grid integration for distributed energy resources, and transport electrification. And since much of this spending could be done by utilities and added to their rate bases, it would translate into above-national-average growth in the rate bases of these companies. Since regulated utility earnings can be projected with considerable confidence by simply multiplying the rate base by the authorized return on equity and allowed equity ratio, this rate base growth would in turn translate into growing earnings. And such earnings, when capitalized at constant or roughly similar valuation multiples to those of comparable utilities at the time of underwriting, provided a visible runway of growing equity value as a cushion for bondholders.

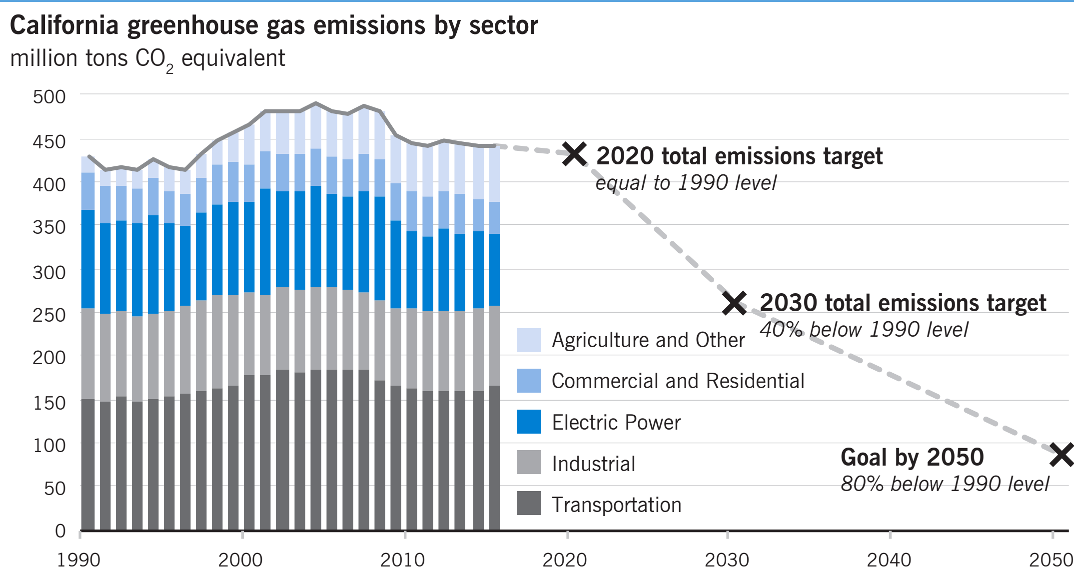
But despite this compelling ESG case, Inherent chose not make an investment at that time because the weak performance of the company in other ESG dimensions dragged down our overall ESG assessment into the mediocre zone, and we saw no imminent catalysts for positive momentum. In particular, the utility's weak regulatory and safety compliance record, physical risks from climate change, and limited linkages between long-term safety and financial performance and executive compensation gave us concern. These risks, when combined with a financial value proposition in its securities that we perceived to lack an

20 https://www.businessinsider.com/wework-ceo-adam-neumann-stock-gives-20-votes-a-share-2019-8.

21 https://www.cnbc.com/2019/08/14/wework-doesnt-have-a-single-woman-director-according-to-ipo-filing.html.

22 https://www.cnbc.com/2019/01/29/pge-owner-of-biggest-us-power-utility-files-for-bankruptcy.html.

Figure 4
California Greenhouse Gas Emissions by Sector and Targets through 2050



Source: U.S. Energy Information Administration, based on California Air Resources Board data, https://www.eia.gov/todayinenergy/detail.php?id=34792.

adequate margin of safety at the time, led us not to make an investment, but instead to put the company and its bonds on our monitor list.

We restarted our active work analyzing the company in late 2018 and early 2019, after a series of catastrophic California wildfires led to rating agencies downgrading the company's debt. In early 2019, the company soon filed for bankruptcy. As shown in Figure 5, these events created a market dislocation that materially lowered bond prices from the time of our initial assessment in 2017. While forced selling in response to the bankruptcy and cacophony of negative headlines on wildfire liabilities drove down unsecured bond pricing, we believed that large parts of our initial case for the positive effects of decarbonization on the company's long-term enterprise value remained valid and intact.

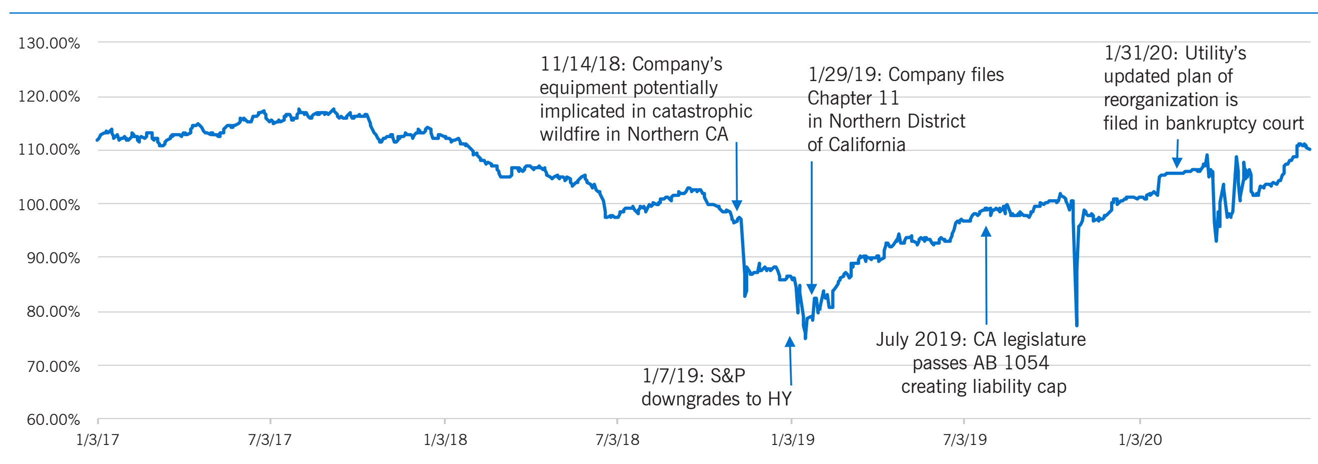
Furthermore, in what proved to be a critical part of our thought process, we expected the bankruptcy process itself to provide an effective forum for addressing large portions of our ESG-related concerns. Indeed, we expected the neutral judicial forum and automatic stay provisions of bankruptcy to enable the company and its regulator to agree upon a future burden-sharing arrangement for past and potential future catastrophic wildfire events that would end up creating social value in several important ways: by accelerating claims processing for wildfire victims; by realigning corporate governance and culture with long-term sustainability; and by linking executive compensation with wildfire safety and prevention objectives.

At the risk of minimizing the legal analysis required in all bankruptcy-related investing, we believe that one of the most powerful drivers of long-term upside in these distressed situations is simply whether a reorganized enterprise, when freed of the burdens of its pre-petition capital structure, is likely to prove a "growing pie" after emergence. In many cases, the businesses that experience financial distress have limited durable value proposition regardless of capital structure; the debt securities of such companies frequently make poor long-term investments even if initial purchase prices appear cheap. In this utility, we believed we had found a rare distressed business that had both predictable cash flows and a clear path, through the required renewable investment ahead to comply with California's ambitious climate goals, to significant growth in enterprise value. Further, we believed this consideration to be paramount in our assessment of the investment's risk-reward prospects—namely, as a growing pie that could provide the underlying basis and rationale for a bankruptcy plan that would eventually be agreeable to wildfire victims, bondholders, and equity holders. In so doing, we were assigning a much lower probability to another possible outcome of the Chapter 11 process: a stagnant or shrinking enterprise that would amplify incentives for each group to fight harder for its share, protracting a self-perpetuating and self-reinforcing downward spiral of value erosion.

Our positive view of this utility's overall asset value allowed us to gain comfort with estimates of bond recoveries in a range of stress case scenarios for our estimation of liabilities.

Figure 5

Utility's Bond Price over Time



Note: The above represents an indicative unsecured bond as a proxy for pricing of the credit.
Source: Bloomberg; Inherent analysis.

In nearly all scenarios, we believed the bonds would be covered at par despite their discounted cash prices. Moreover, in our assessment, the promise of long-term rate base growth would likely create a compelling proposition for raising future equity capital, even if significant dilution to the then-current share count would be required to satisfy eventual wildfire liabilities. Indeed, while this potential for equity dilution made the range of expected trading outcomes for the common stock wide and difficult to forecast with precision, our view that the growing enterprise would create incentives for equity holders to put in fresh capital at a wide range of pre-money valuations made the company's bonds an easier bet. In other words, regardless of how much dilution the equity would eventually experience, there would still be an equity cushion beneath the utility's bonds even in our stress cases.

For this reason, we believed that these bonds—which were trading at significant discounts to par value—would either be reinstated by the bankruptcy court at their pre-petition money terms or refinanced with new money. In an especially draconian scenario in which the eventual wildfire liabilities would prove too great for pre-petition equity holders to put up new capital, it could actually create an upside scenario for bond creditors by giving them an opportunity to put up their own new money to participate in future equity upside at an even more discounted valuation. While we judged this outcome unlikely, we considered it a helpful reinforcement of the positively asymmetric risk-reward profile of the credit investment.

This line of thinking led us to take a long position in the utility's unsecured bonds. As our iterative work on the situation continued, primary source research in consultation with key stakeholders, including government officials, regulators, wildfire victim representatives, and other creditors led us to assign even greater weight to our hypotheses that the bankruptcy process would provide an impetus for a clarified regulatory framework around cost recovery and burden sharing for future wildfires and for a positive ESG reset at the company. Indeed, it seemed that all stakeholders were coming to similar realizations that wildfire safety and financial value were inextricably linked, and that solvent utilities with access to the capital markets were a critical part of the long-term wildfire mitigation and climate goals of the state. As our conviction in these beliefs grew, we continued to build on our initial credit investment.

Through early 2020, the utility's bonds appreciated to par and beyond as our views became more widely held, motivated selling by legacy bondholders largely ended, and a path to exiting bankruptcy allowed credit investors to focus increasingly on target exit spreads for bonds rather than on asset coverage alone. Critically important, in July 2019, the California legislature passed AB 1054, a bill that changed the regulatory treatment of the state's utilities and catastrophic wildfires by providing for cost recovery, pre-event prudency certifications, a collective reinsurance fund, and a liability cap. Positive developments in the court process regarding the treatment of bond coupons and the ranking status of bonds in the bankruptcy plan have eventually led to even further gains.

These positive developments reflect in large part the realization of our ESG-driven thesis about the attractiveness of the utility's long-term growth prospects. Both pre-petition creditors and pre-petition equity holders argued before the bankruptcy court for their rights to invest new money in the

reorganized utility's equity after paying all wildfire-related claims; this was true even though it implied significant dilution for equity holders.[23] In order to preserve their rights, pre-petition equity holders needed either to demonstrate that bonds were not impaired in any way under the bankruptcy plan or to secure affirmative votes of any impaired bond class.

To effect a settlement to this end and expedite the utility's exit from bankruptcy, longer-dated, higher-coupon, unsecured bond creditors were given favorable treatment under the eventual bankruptcy plan that would exchange their bonds for secured bonds with somewhat lower coupon rates and longer maturities. Forward-looking credit investors quickly recognized the reduced credit risk of the secured bonds and the value of the proposed new money terms, taking the market prices of these bonds well above par by early 2020.

It is rare in bankruptcy processes to experience such high recoveries for creditors or material recoveries for pre-petition equity, but Inherent saw prospects of future growth in this case that were highly unusual. We believe that the climate portion of our ESG analysis was especially helpful in identifying, preparing for and quickly shedding light on this opportunity, allowing us to deploy capital at attractive prices before markets fully priced in the positives. Similarly, we believe that the governance and culture portions of our ESG analysis helped us to avoid losses between our initial review and the company's bankruptcy.

While it is still too early to write the conclusion to this utility's story, the initial signs of progress are encouraging. Despite recent headlines, our analysis suggests that although the situation for both the utility and California remain complicated by physical climate risks and parts of the yet-to-be-replaced physical infrastructure, both the company and the state are now in a much better position to address the threats of wildfires than at the time of our initial work in 2017. Consistent with what was originally an unproven thesis of ours, the bankruptcy process has improved the company's overall ESG credentials by making enhancements in several crucial dimensions. Among the most important changes, the weighting of safety in its executive compensation plan has increased by multiples, going well beyond peer averages. We believe this will encourage major investment in key wildfire mitigation efforts such as vegetation management, insulation of conductors, weather monitoring, and targeted de-energization of the grid. Collectively, these efforts along with an improving culture of compliance and safety should significantly reduce the future probability of utility-caused fires versus the prior baseline.

Conclusion

The three case studies and details of Inherent Group's investment process presented in this article are meant to demonstrate the firm's contention that the application of ESG in credit analysis can drive improved risk-adjusted performance. While our approach is one of many possible in the credit markets, and we work each day to keep making it better, our experience with formulating and implementing this approach has led to a number of actionable investment insights that have improved our ability to distinguish likely ESG winners from losers. We look forward to continuing to harvest the fruits of this work over time by expanding the universe of credits we underwrite in our ESG framework and by deploying this work in our portfolio-construction and portfolio-management decisions. Over time, the omission or cursory application of ESG by today's credit investors is likely to be viewed increasingly as a significant source of market inefficiency and investment opportunity.

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23 See, for instance: https://www.washingtonpost.com/business/on-small-business/pimco-elliott-group-pressnewsom-to-reject-pgandes-restructuring-plan/2019/12/12/ba10ac66-1cec-11ea-977a-15a6710ed6da_story.html.

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