

De-risking? Mind the carbon!

Many asset owners are interested in climate risks and doing their part to reduce their carbon footprint. Some of these asset owners may also be interested in de-risking their portfolios by shifting from equities into bonds. Yet, pursuit of both goals at once can present a challenge: Without careful design and execution, the act of de-risking can drag the portfolio's carbon footprint in the wrong direction.

Specifically, this can happen when typical equity exposures that are dominated by lower-carbon sectors like technology are sold in favor of corporate bonds, which can often have relatively more exposure to energy-intensive sectors like utilities and industrials. We think that climate transition requires charting a smart pathway, allowing for the pursuit of decarbonizing the real economy over time while also allowing for the pursuit of alpha by selecting the expected climate transition winners.

What is carbon intensity?

There are many ways to analyze the 'carbon' or, more accurately, the greenhouse gas emissions of a business. Broadly accepted protocols allow us to delineate between the direct emissions of a company and those of its upstream supply chain and the carbon impacts of its products and services. For example, if you consider the total carbon emissions related to a manufacturer of televisions, this protocol allows us to understand which emissions should be assessed for which purposes. When it comes to comparing companies, these emissions numbers are the inputs to carbon metrics. One useful and widely used measure, termed carbon intensity, takes the carbon emissions of a firm and normalizes it by the revenue of the organization in order to help compare companies of different sizes. This measure is expressed as metric tons of carbon dioxide equivalent CO₂e per million dollars (\$M) of revenue. Such a measure can be used by investors to assess one view of the carbon in their investments across certain asset classes.

How does carbon intensity vary by asset class?

Average carbon intensity can vary widely across asset classes, mostly due to the differences in composition of indexes. Figure 1 shows how the carbon-intensive assets that comprise bond indexes are reflective of carbon-intensive issuers.

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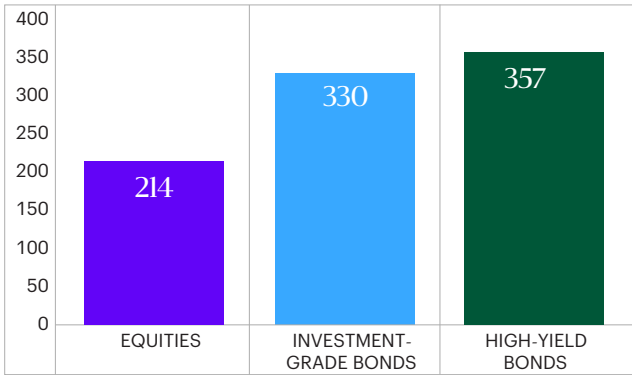
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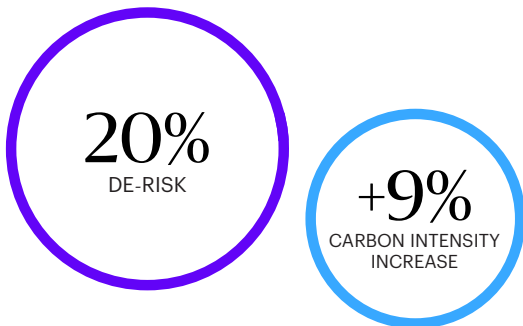
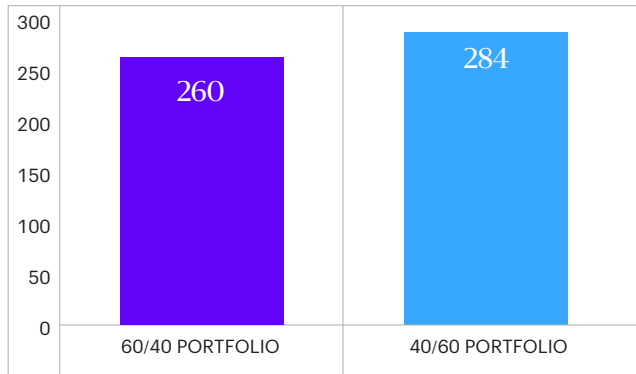
FIGURE 1: AVERAGE CARBON INTENSITY OF KEY INDEXES ACROSS ASSET CLASSES



Sources: Allspring and S&P Trucost. As of September 30, 2021. Equities index: MSCI ACWI (Net). Investment-grade bonds index: Bloomberg Global Aggregate Corporate Index (USD Hedged). High-yield bonds index: GHY Index. Carbon intensity: weighted average (metric tons CO₂e/\$1M revenues).

From this, it is easy to see how de-risking a portfolio, by moving from equities to either investment-grade or high-yield credit, could increase the carbon intensity of a portfolio, sometimes significantly. For example, de-risking a 60% equity/40% bond portfolio (commonly referred to as a 60/40 portfolio) to a 40/60 portfolio, by reallocating 20 percentage points from equity to bonds, may increase the weighted average carbon intensity of the portfolio by 9%, as shown in Figure 2.

FIGURE 2: CHANGE IN AVERAGE PORTFOLIO CARBON INTENSITY, USING KEY INDEXES



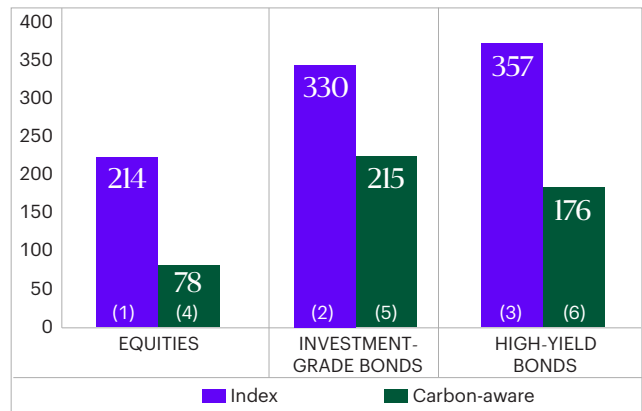
Sources: Allspring and S&P Trucost. As of September 30, 2021. Equities index: MSCI ACWI (Net). Investment-grade bonds index: Bloomberg Global Aggregate Corporate Index (USD Hedged). Carbon intensity: weighted average (metric tons CO₂e/\$1M revenues).

Carbon-aware de-risking

Within various asset classes with corporate exposures, different issuers have different carbon footprints, and it can be helpful to be aware of these distinctions. It follows that a carbon-aware management style can make a meaningful carbon impact within an asset class and hence can benefit the whole portfolio.

Initially, when managing towards climate and carbon goals in an asset portfolio, investors focused their efforts on their equity investments. However, we are now seeing more interest in considering the contributions toward these goals from corporate credit—both investment-grade and high-yield. We think of this as a healthy broadening of attention that recognizes corporate bondholders also have a role to play in steering capital and affecting decarbonization of the economy. Figure 3 shows how the use of a carbon-aware approach can affect different legs of a portfolio, thereby allowing the pursuit of both de-risking and decarbonizing goals.

FIGURE 3: AVERAGE CARBON INTENSITY FOR ASSET CLASSES, COMPARING INDEX & CARBON-AWARE EXPOSURES



Sources: Allspring and S&P Trucost. As of September 30, 2021.
1. Equities index: MSCI ACWI (Net).
2. Investment-grade bonds index: Bloomberg Global Aggregate Corporate Index (USD Hedged).
3. High-yield bonds index: GHY Index.
4. Global equities carbon-aware: Allspring 2 Degree Global Equity.
5. Global credit carbon-aware: Allspring Climate Transition Global Investment Grade Credit.
6. Global high-yield carbon-aware: Allspring Global HY Climate Transition Credit.
Carbon intensity: weighted average (metric tons CO₂e/\$1M revenues).

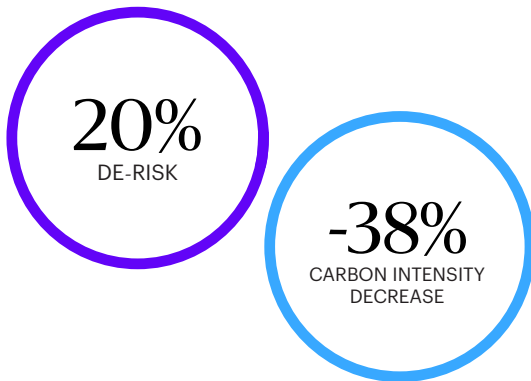
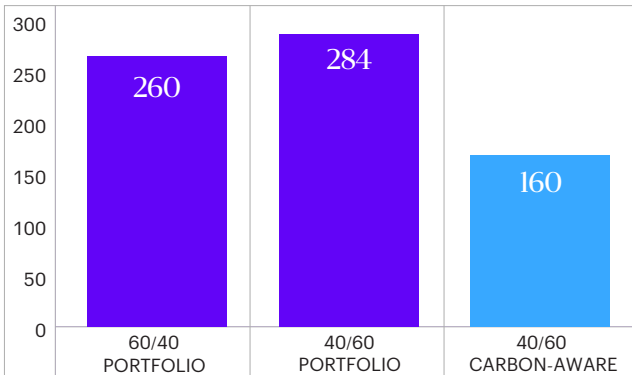
Importantly, we believe good investments can align with a thoughtful approach to managing down carbon emissions. One way we do this is through what we term a Climate Transition strategy. Key tenets of this approach are as follows:

- **Inclusive, not exclusionary.** We do not seek to exclude industrial sectors that are high emitters, believing that carbon intensity is best managed by combining portfolio and company views. At the company level, the best in each industry, and especially those making the most progress toward a low-carbon future, can offer the prospect of superior returns through better risk management and/or opportunity capture.



- **Portfolios are managed against standard market indexes.** This means that other portfolio characteristics are kept in line with those of indexes and are managed to seek to outperform with the lowest possible risk. This makes the approach easier to adopt and oversee.
- **2050 goal.** Portfolios move toward this goal over time, ensuring that as the world evolves, so does the portfolio. This provides discipline and a long-term focus.

FIGURE 4: AVERAGE CARBON INTENSITY FOR VARIOUS PORTFOLIO APPROACHES



Sources: Allspring and S&P Trucost. As of September 30, 2021. Equities index: MSCI ACWI (Net). Investment-grade bonds index: Bloomberg Global Aggregate Corporate Index (USD Hedged). High-yield bonds index: GHY Index. Global equities carbon-aware: Allspring 2 Degree Global Equity. Global credit carbon-aware: Allspring Climate Transition Global Investment Grade Credit. Global high-yield carbon-aware: Allspring Global HY Climate Transition Credit. Carbon intensity: weighted average (metric tons CO₂e/\$1M revenues).

More than just carbon

Carbon intensity is a useful measure, but there is much more:

- 01** Carbon intensity is a historic measure. It looks at what a company emitted in the previous year. Investors need to consider the future. Are issuers making improvements? Today's high-carbon emitters might be the low emitters of tomorrow if they are set firmly on making changes. Overall, we need to think about how sectors need to decarbonize in different ways, which companies are well-positioned for these changes, and what a decarbonized economy of the future looks like.
- 02** Typical carbon intensity metrics typically focus on the most direct elements of an issuer's emissions. There is much discussion about the most appropriate way to incorporate up- and down-stream carbon emissions without the potential complexities of double-counting. Many answers could be found in corporates' business approaches.
- 03** Focusing on carbon can be helpful and important for climate progress and we encourage investors to widen their horizons and look to incorporate other sustainability objectives beyond climate.

Conclusion

When de-risking, mind the carbon! As we've shown, de-risking a portfolio can inadvertently lead to an increased carbon intensity. Carbon-aware approaches to building and managing portfolios can reduce this risk. There is a lot that can be done across asset classes to support a transition to a lower-carbon economy, especially by adopting an active approach to engagement and investing in climate transition leaders.



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