

**Credit Selection
Can Be a Gateway to
Matched Liabilities
and Lower
Contributions.**

- Credit selection can consistently add value while adhering to tracking-error targets in long duration mandates.
- Attention to liquidity and transaction costs and a particular emphasis on risk awareness are critical elements of successful credit investing.
- In the present macroeconomic environment, avoiding credit downgrades should be a priority for plan sponsors.
- The addition of a credit-research-driven manager could complement many existing LDI manager lineups – with the potential to reduce the correlation of excess returns and, therefore, lower overall volatility.

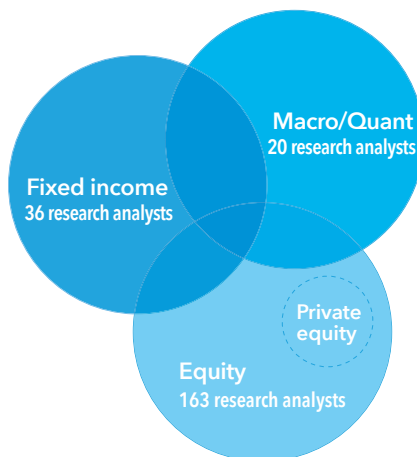
Why Collaborative Research Is Invaluable in Long Duration Credit Investing

Our sizable analyst teams work together, which is very helpful when ...

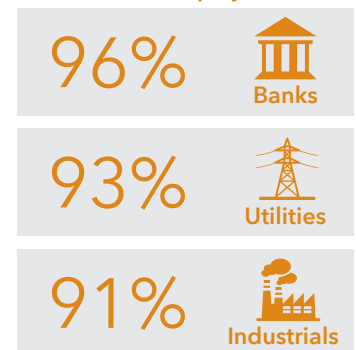
... 92% of corporates in the long credit universe also issue equity.



Greg Garrett, CFA
Senior Vice President, LDI Solutions
Based in New York



% of issuers in major sectors that also issue equity:



Analyst team as of June 30, 2017. Credit universe data as of March 31, 2017, based on Bloomberg Barclays U.S. Long Credit Index.

Sources: Bloomberg Index Services Ltd., Capital Group

Multiple Perspectives. One Approach.®

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Plan Sponsors Have Choices for Their Liability-Hedging Portfolios

When building a liability-hedging portfolio, many plan sponsors use multiple long duration managers. Since not all long duration strategies are alike, a diversified manager lineup can help reduce overall risk for plan sponsors.

Capital Group's approach focuses largely on holding a portfolio of cash bonds that reflects credit convictions while also trying to optimize for shifts in the liquidity environment. Derivatives are used to close any gaps in risk positioning relative to the bond index or liability.

Different approaches have different strengths and limitations. By comparing excess return correlations, plan sponsors can statistically evaluate the benefits of different approaches and compare the advantage of adding one manager versus another.

"Because of our strength in fundamental credit research, Capital Group has typically sought to ... add value mostly via security and industry selection."

Tracking Error Targets Don't Diminish the Case for Credit Selection

As plan sponsors gain experience with liability-driven investing (LDI) and approach a higher funded status, many are focused on designing and implementing LDI mandates with greater risk control. The goal is simple: minimizing funded status volatility.

The imposition of tracking error targets on these strategies has been a logical step in this direction. Tracking error constraints allow plan sponsors to gain visibility and better control the discrete sources of risk and excess return in LDI mandates.

Capital Group has about two decades of experience in managing long duration credit portfolios. We have sought to consistently add value in these mandates – including those with explicit tracking error targets – with an investment approach that:

- Emphasizes deep credit research
- Embeds multiple levels of risk management into the investment discipline
- Pays close attention to liquidity and transaction costs

Generate Excess Returns and Effectively Hedge Liabilities

There are a number of different approaches utilized for managing long duration assets with costs and benefits to each approach. Portfolio managers can look to add value by emphasizing key decisions around security selection, sector allocation, and duration and curve positioning.

Security Selection

- Bottom-up views on industries, individual corporate issuers and individual bonds are driven by fundamental credit research and/or by tactical market opportunities.
- Relative value positioning in issuers and securities is also important. In down markets, for instance, underweight positions in more vulnerable issuers can be a major driver of relative returns.

Sector Selection

- Top-down views on the value of corporates versus governments (the corporate basis).
- If permitted by guidelines, expressing views on plus sectors such as high yield and emerging markets sovereigns and corporates can be an important aspect.

Duration & Curve Positioning

- Relative long or short duration positions
- Seeking to benefit from anticipated changes to the slope of the 10/30 yield curve
- Using swaps to express more refined views on specific parts of the yield curve

Because of our strength in fundamental credit research, Capital Group has typically sought to calibrate portfolio risks to add value mostly via security and industry selection. Duration and curve positioning has often been a modest driver of excess return in our liability-hedging strategies.

Can You Consistently Count on Credit Research to Add Value?

It's natural for plan sponsors to question whether the credit market will consistently give long duration managers opportunities to add value primarily through bottom-up credit research. A look at the data suggests that this concern is unfounded.

For each issuer, we computed the weighted average duration-adjusted monthly return, or the spread return, of all of the bonds in the Bloomberg Barclays Long Credit Index. We then computed the cross-sectional standard deviation of this return across all issuers for the past decade.

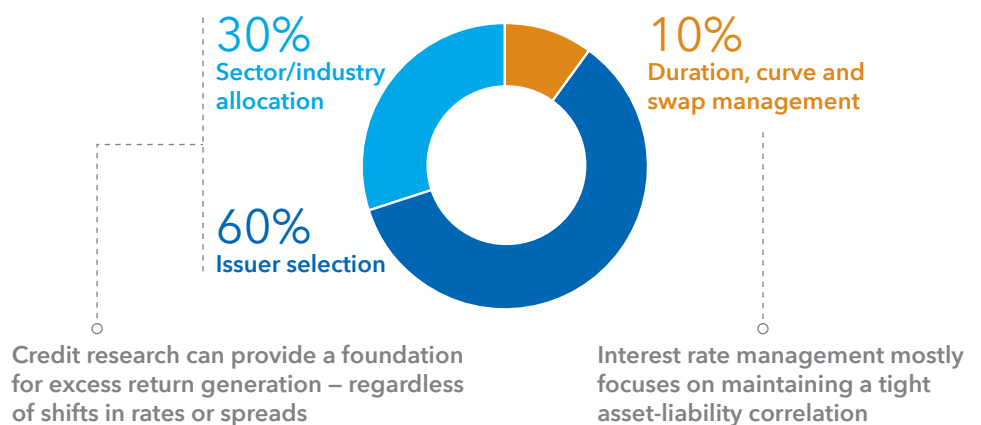
As the chart on the next page shows, recent issuer dispersion has mostly been higher than it was in the pre-crisis period; the market is, on average, offering more and bigger opportunities to selective credit managers. LBOs may be less frequent nowadays, but credit events in general are not – and if anything, their impact can be higher.

At times of low dispersion, selective managers can add significant value by avoiding troubled credits, or even those issuers that have a willingness to sacrifice balance sheet metrics in an effort to grow their business or support their share price.

“At times of low dispersion, selective managers can add significant value by avoiding troubled credits.”

Research and a Corporate Focus Can Add Value in Long Duration

Sources of Potential Excess Returns



For illustrative purposes only. Source: Capital Group

Credit Selection in Action

Capital Group's lengthy experience of managing long duration credit portfolios includes many possible examples of credit-based strategies that have added value to tracking error-constrained portfolios.

Here we offer just a few examples – provided solely for informational purposes (they are not an offer, or a recommendation to buy or sell any security or instrument mentioned). Likewise, portfolio exposures noted are for illustrative purposes only; in practice these would be adjusted over time as valuations and expected correlations change.

One common trait should be plain to see: risk awareness is embedded in all the ways we seek to add value with credit selection.

Issuer Selection

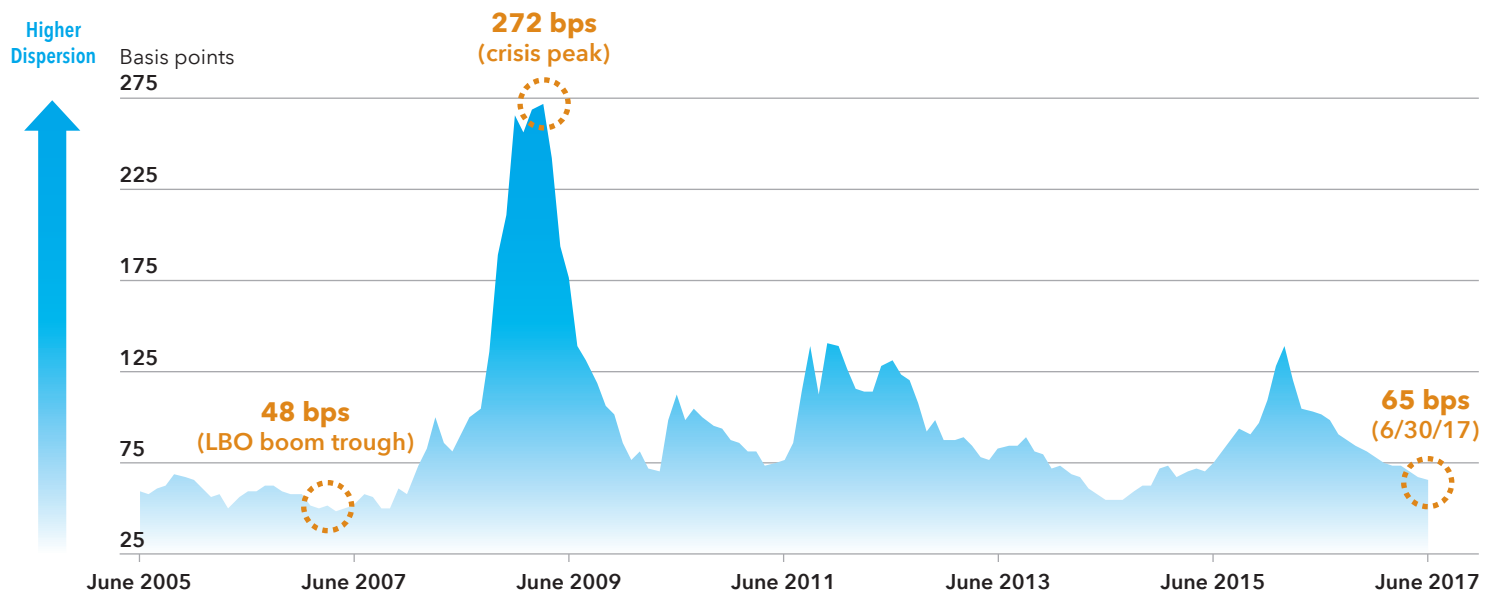
The dispersion of issuer returns within industry groups means that managers can add value through credit selection – even when maintaining near-neutral industry weights.

Corporate activity in the form of mergers and acquisitions can present both challenges and opportunities. The pharmaceutical sector has been an area of significant activity. Assessing drug pipeline opportunities, understanding management priorities and building a valuation framework involve complex analysis and collaboration between our experienced credit and equity analysts covering the sector.

We have tended to favor those companies with strong drug pipelines and good management teams that have recently completed leveraging transactions. Conversely, we have often sought to limit exposure to firms that we viewed as likely to pursue a transaction (and thus be large issuers).

Credit Dispersion Has Moderated, but Remains Above the Lows of the LBO Boom

U.S. Long Credit Universe Dispersion (Interquartile Range)



Data as of June 30, 2017. Dispersion measure shows spread gap between the second quartile's upper bound and the third quartile's lower bound for the constituent credit spreads within the Bloomberg Barclays U.S. Long Credit Index.

Source: Bloomberg Index Services Ltd.

Collaboration between bond and equity investment professionals is at the heart of our approach. The potential benefits of collaborative research are greater access to management teams, deeper understanding of plans for capital allocation and a more holistic perspective that helps create differentiated credit insights.

Industry Tilt: Relative Value Among Energy Companies

Managing exposure to different segments of an industry is an important way of leveraging credit research to try to add value. It is also a source of risk management. One method of limiting potential tracking error is to tilt holdings toward preferred industry subgroups.

Energy-related credits have historically traded in line with changes in the level of oil and gas prices. However, there can be a wide dispersion between different types of energy firms. In late 2015 and early 2016, oil prices were reaching their lows. Spreads for energy industry companies had widened significantly. Pipeline companies were trading wide relative to the entire energy complex, including oil field services companies and independent energy producers.

While pipeline firms tend to carry higher levels of leverage, their cash flows are relatively consistent given the nature of their contracted revenue. By adding to holdings of these companies and the energy position overall during this period, some of our clients were able to benefit from both the narrowing of energy spreads as well as the spread compression of the pipeline sector.

Issuer Curve Positioning: Flattening and Inversion

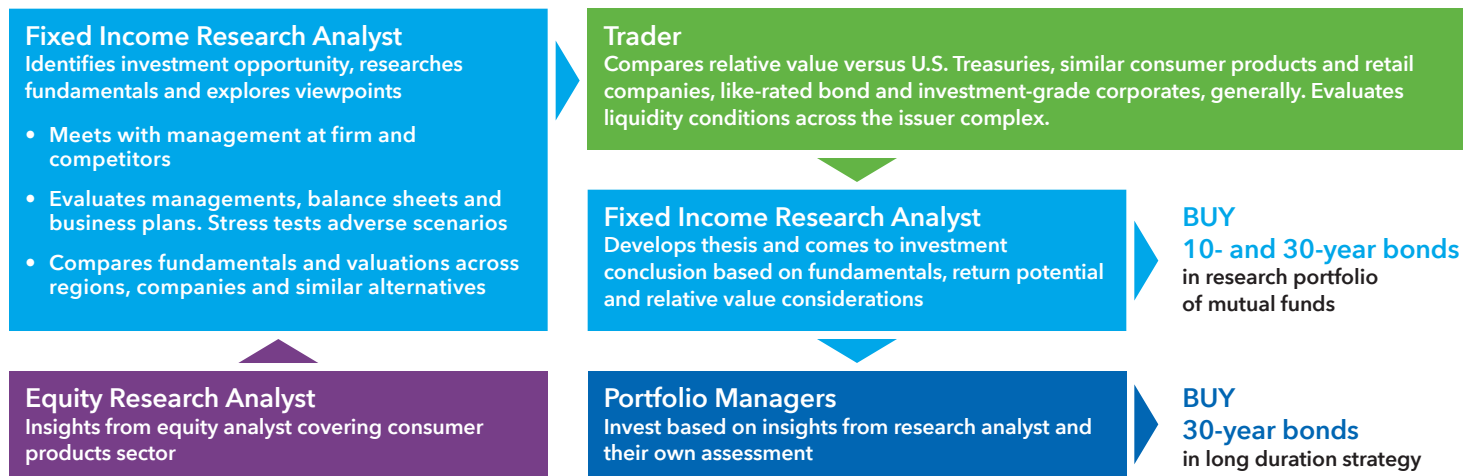
Credit curves reflect market expectations for default, compensation for price volatility and generic term premiums. Interest rate swaps can help neutralize the impact of selective credit curve decisions on yield curve exposures (portfolio key rate duration), which is very useful in a tracking-error-constrained mandate.

A number of years ago, for example, market conditions seemed to point toward a further inversion of 20s/30s credit curves. At the time, in certain client accounts, we underweighted the 20-year part of the curve while overweighting the 30-year portion.

We also anticipated a flattening of generic 10s/30s credit curves in higher quality credits – partly because of demand from LDI investors. Consequently, in certain client accounts we went overweight in 30-year A-rated exposure, while underweighting 20-year A-rated bonds.

Capital Group's Corporate Investment Process – Hypothetical Example

A Global Consumer Products Company



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Source: Capital Group.

Liquidity Tilt: Rolling Into New Benchmark Issues

Secondary market liquidity (and the compensation the market pays for it) can be bond-specific; it varies with factors such as company size, industry, coupon and maturity. It's possible to tilt portfolio exposure toward those areas where liquidity premiums are expected to compress the most or widen the least.

On average, 20-year bonds have been less liquid (higher liquidity cost score) than both 10-year and 30-year bonds over the last few years. Bank credits have been most liquid in the 10-year maturity, while telecommunications credits are most liquid in the 30-year space.

Since the financial crisis, we have deliberately rolled into benchmark new issues for more frequent issuers. We anticipate that investor liquidity preference for benchmark issues will remain high. To supplement this strategy, we also look for pockets of value where liquidity premiums expanded (such as in capital goods and electric utilities where underlying credit quality is high).

Costs Matter – Especially in Risk-Controlled Mandates

Liquidity costs can have a significant impact on both return potential and tracking error. In a risk-controlled mandate with modest alpha potential, it can take a very long time to earn back excessive transaction costs.

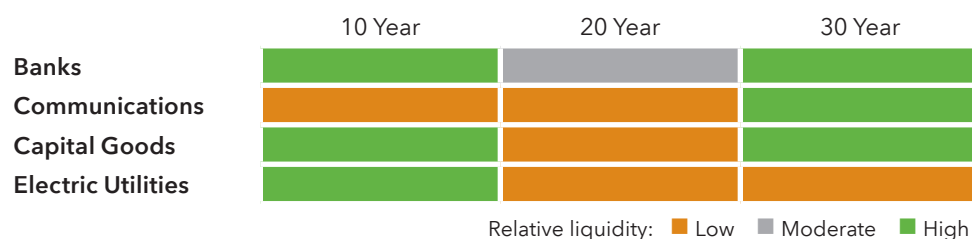
Investors often focus on average transaction costs as a measure of market liquidity. When making decisions on investment strategy or implementation, however, it is necessary to take account of multiple dimensions of market liquidity:

- Bid/ask spreads
- Quoted size
- Time to execute a larger trade
- Market impact of a larger trade on the prices of securities
- Information content of a trade (how much it communicates about investment intentions)

Transaction costs can be significant in areas of the credit market where actively traded bonds are in short supply, such as the 20-year portion of the yield curve. Corporations generally do not issue 20-year tenures; five-, 10- and 30-year bonds are more common.

Consequently, corporate issues with 20 years left to maturity tend to be 10-year-old 30-year bonds, which are held by insurance companies and pension plans that are utilizing them to match specific liabilities. The price for coaxing these holders to sell can at times be multiple points in dollar price. We are, therefore, mindful of the trade-off between the potential benefit of matching a key-rate-duration in the cash bond market and the cost entailed.

Relative Liquidity Conditions Vary Greatly Across Sectors and Maturities



For illustrative purposes only.

Based on Bloomberg Barclays liquidity cost scores as of July 2017.

Sources: Bloomberg Index Services Ltd., Capital Group

Why Risk Management Should Be Multi-Layered

For an investment manager operating with risk targets, quantifying risk is crucial. The day-to-day risk monitoring tool for a tracking-error-constrained portfolio is a model that attempts to measure the potential tracking error implied by the portfolio's structure.

The model's purpose is twofold: ensure that the overall level of active risk-taking remains consistent with mandate guidelines and that the risk budget is being allocated as intended.

Third-party tracking-error models have become more popular among long duration credit managers. Recognizing model limitations is critically important. Blind reliance on a model to prescribe what risk can and cannot be taken in a portfolio may have bad outcomes. A risk model is only as good as the covariance matrix on which it relies. Volatilities and correlations are notoriously variable over time.

It's important to at least understand what portfolio risk could look like under different assumptions, rather than just using the default covariance matrix. Different investments may interact in ways not captured by current model assumptions, and near-term changes in volatilities and correlations should be monitored.

Scenario analysis or stress testing are useful for assessing how a portfolio might respond to extreme events. In practice, it is more productive to focus in detail on a small number of scenarios.

We have found that a combination of historical scenarios and economically plausible forward scenarios is effective. In other words, we tend to identify potential future events that are most important to focus on, but use historical data to help assess how risk factors could behave in those circumstances.

In long duration mandates, Capital Group has tended to make light use of derivatives to fine tune exposures – not to make gross modifications to portfolio risk. A derivatives-lite approach has several important potential benefits:

- Cash bonds can more closely match the liability discount curve and lessen basis risk
- High transparency and ease of analysis by the plan sponsor
- Reduced costs associated with holding collateral

Credit Selection Offers Real Benefits – Especially When Downgrade Activity Picks Up

The number of tracking-error-constrained mandates should continue to grow over time as more pension plans approach the “completion” phase of the glide path. Our experience suggests that strategies focused on credit selection have the potential to consistently add value.

At the most basic level, avoiding downgraded bonds can be very impactful. After all, downgraded credits that drop out of the discount rate calculation but remain in a liability hedging portfolio can result in losses as well as a liability mismatch.

In the last decade, the A-rated-and-above corporate credit universe has seen numerous downgrades in every sector from banking to telecoms. Because we appear to be in the later stages of a U.S. economic cycle, and corporate leverage as a percentage of GDP is close to all-time highs, it would not be surprising to see more downgrades in the next few years.

Our experience with a variety of clients has, we believe, shown the value of our approach: effectively matching specific pension liabilities while also seeking excess returns, consistent with a client’s specific risk tolerance.

We think this combination is powerful. Not only do plan sponsors have the potential to reduce their funded status volatility, they can also generate incremental returns that may help prepare for unexpected changes in their plan’s liability profile (due to shifts in plan participant population or actuarial assumptions) and perhaps reduce their amount of future contributions.

Our distinctive approach may also have another key benefit for plan sponsors. Because we seek to add value primarily through bottom-up credit research, our strategies may have low correlations with other popular long duration managers and, therefore, act as a source of diversification potential for LDI manager lineups.

Key Takeaways

- Credit selection can consistently add value while adhering to tracking-error targets in long duration mandates.
- Close attention to liquidity and transaction costs and a particular emphasis on risk awareness are critical elements of successful credit investing.
- In the present macroeconomic environment, avoiding credit downgrades should be a priority for plan sponsors.
- Plan sponsors may find that adding a credit-research-driven manager complements their existing LDI manager lineup – reducing the correlation of excess returns and, therefore, lowering overall volatility.

Past results are not predictive of results in future periods.

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