Calamos Credit Analysis Process

By Jon Vacko, CFA

Credit analysis requires a firm understanding of the strength and quality of a company's cash flows as well as a thorough review of its capital structure. This paper provides an overview of the Calamos credit research process, highlighting the fundamental and quantitative processes that are incorporated into our analysis. We will look at the historical-based models, the forward-looking models and the fundamental analysis that contribute to our pricing of risk.

ABOUT THE AUTHOR

Jon Vacko, CFA is a senior vice president and Co-Head of Research and Investments at Calamos Investments, with portfolio management and research responsibilities. He is directly involved in the fundamental analysis of companies. In line with Calamos' integrated investment team structure, Jon works within a senior team of professionals and is an asset class generalist with sector responsibilities across all of Calamos' strategies.

Calamos Credit Analysis Process

Credit analysis has been entrenched in the Calamos investment process since the firm started managing convertible portfolios more than 30 years ago. In-depth credit analysis is required when analyzing convertibles to determine the appropriate discount rate for calculating the security's straight bond value. The convertible universe's longer-term historical exposure to non-investment grade credits, which is above 50%, has required us to remain continually credit focused. But our credit analysis is equally important when we evaluate investment grade bonds, high yield corporate bonds, and equities.

The firm uses a one-team, one-process investment structure that applies consistent, rigorous credit analysis across all potential investment opportunities. Each research team member is dedicated to covering companies in a specific group of sectors, and that research contributes to all investment strategies. In our one-team, one-process investment approach, every team member uses the same research models and same processes when considering a security's suitability for investment. We consistently apply this process, of which credit analysis is an integral part, alongside our core belief that any security within a firm's capital structure can be valued through the analysis of that firm's cash flows. If we understand the source and sustainability of a firm's cash flow, we can use that information to value the company's fixed income securities, convertible bonds or its equity. The one-team, one-process structure also allows us to learn from each other, create a common language for all members, and build what we believe to be a sustainable investment process to persevere over the longer term.

Before discussing the credit research process, it is important to first address the firm's investment philosophy. Calamos' investment management approach is focused on achieving an optimal balance between maximizing return and managing risk throughout market cycles. We know returns cannot be managed, but we are ardent believers that we can manage risk. We avoid short-term market timing and, for that reason, we remain fully invested, focused on the long-term, and diversified across sectors, which we believe allows for the highest probability of success. Our aim is to protect capital during volatile markets. Because of this, we are not distressed credit buyers and we stay away from securities considered workouts (where lenders renegotiate loan repayments with borrowers that are in or near default.) Our top-down calls, for U.S. and non-U.S. securities across asset classes,

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are driven by the current economic climate as well as long-term secular themes, such as globalization, increased productivity, demographic shifts or infrastructure rebuilding, and a belief in a competitive environment and the economic freedoms that drive economic prosperity, such as private property rights, low taxation, low regulation, and free trade.

Credit Analysis

The credit analysis process is multifaceted. It blends fundamental and quantitative processes, incorporating historical-based models, market-based forward-looking models, and fundamental analysis. Our proprietary software system is a unifying force behind the process, providing quantitative analysis, company monitoring, and consistency across strategies and analysts. Our research analysts continually strive to improve the overall system, developing and adding innovative processes and techniques. The quantitative model-driven analysis is paired with qualitative analysis to complete the full credit review.

Historical Analysis

The historical analysis begins with a review of traditional credit ratios, such as:

> The current ratio
> Debt-service coverage ratio
> Debt to total capital ratio

This helps to provide an initial understanding of a company's balance sheet and cash flow coverage, as well as offering a relative peer group perspective. Basic credit ratios help when evaluating historical trends, relative positioning and performance among industry peers, and management's risk tolerance. More specifically, ratio analysis can help assess profitability, liquidity of assets, interest coverage or debt servicing capabilities, cash flow, capital structure leverage, off-balance sheet liabilities, cyclicality of the business, industry competitiveness, and more.
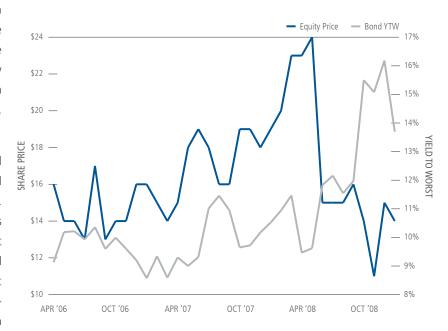
In conjunction with ratio analysis, we use a multivariate model to verify or adjust the securities' ratings generated by external third-party credit rating agencies, such as S&P and Moody's. Although third-party ratings and their watch lists can serve as a guide, we have found that the credit agency ratings are not always timely; often they reflect obsolete market conditions, and lack sufficient gradient. For example, we often find significant differences between two BB rated securities. We view third-party ratings as one data point in our analysis and use it as a reference for credit research performed in house.

Market-based Models

The flaw in historical ratio analysis is that it is backward-looking and can be updated only a few times a year. Historical ratios ignore the valuable information available in current equity and debt market prices. Markets are open 250 days a year and provide meaningful feedback. We view market signals, such as prices in equity and debt markets, as reflecting the collective knowledge of all participants, which is updated constantly and responds immediately to the changing market environment.

Our use of market signals stems from the high correlation the debt market's have with the equity markets. For example, high yield debt historically has demonstrated a 55% correlation with the issuing company's equity price movements on the downside. If a company's stock price has declined significantly, then there is a higher probability that the credit quality is in question. For example, Figure 1 shows the relationship between an agriculture company's stock price and the corresponding

FIGURE 1: RELATIONSHIP OF STOCK PRICE AND YIELD TO WORST

Source: Bloomberg. Data from March 2006 through February 2009.

yield to worst of its 7.5% coupon bond maturing 2014. (Yield to worst is a bond's lowest potential yield without the issuer defaulting.) The credit spread and stock price are near mirror images of each other, demonstrating this link.

Credit Barrier Price. A market signal we employ in our analysis is credit barrier price, which focuses on the fixed dollar coverage obligations of a firm and relates it back to the firm's invested capital (capital deployed to run the firm's operations) and the company's equity price. A company's ongoing obligations include interest on debt, lease payments, preferred dividends, pension costs and other items. We use our internal equity valuation models to convert these fixed costs into a per-share equity price—which is the credit barrier price—based on the assumption that the firm generates returns on invested capital at a level to only meet its fixed obligations into perpetuity. This valuation serves as a warning price and a trigger point for deeper analysis. The implication is that if a company's stock price drops below the credit barrier, equity market participants are implying that the company cannot cover its fixed obligations, meaning there is a question about the company's ability to operate as a going concern.

Contingent Claims Analysis. Another market model we

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use is based on contingent claims analysis. This model comes from the body of research that was introduced by economist and Nobel laureate Robert Merton in the early 1970s. Merton developed a method for quantifying a bond's risk premium as a function of the overall business risk, defined as the volatility of the company's assets. The greater the business risk, then the greater the volatility, hence the greater the risk that the

company's asset value falls below its obligations. Once the asset value falls below a level where the company can no longer service its debt, then a default on the bonds can occur. In other words, we assume that as long as the value of the company is worth more than its obligations, the company will continue to operate. But once this no longer holds true, we question the company's ability to operate as a going concern. The level that is considered the default point is generally calculated as a percentage of a company's liabilities.
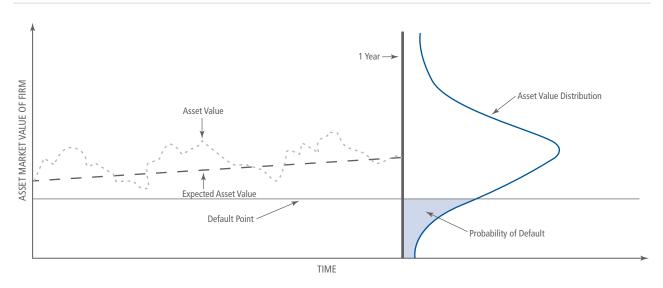
Figure 2 (page 5) illustrates the contingent claims concept. We convert a company's default point to a per-share value to continually compare it to the daily stock price, which reflects the company's asset value. Given the theoretical nature of models, when the equity value falls below the default point, it does not mean a company is destined for immediate default. Rather, this is a signal to us to further review it. Once again, we are relying on the full knowledge of all market participants who, in essence, vote daily on a company's ability to meet its obligations.

Market-based models can improve the credit analysis when incorporated with traditional credit ratio analysis as they balance each other's flaws. However, the weakness in using market-based, forward-looking analysis is that at extremes, the equity and debt markets may overstate the risk or safety of issues. Market bubbles can lull investors into a false sense of security, while prices during recessionary periods may overstate actual default probabilities.

Fundamental Analysis

Both historical and forward-looking approaches are valuable to gain a solid understanding of a company's risks, but have flaws when used in isolation. To improve the overall credit analysis process and achieve a better understanding of the underlying business, we meld the historical and future analyses with numerous qualitative factors that cannot be easily modeled in any software system and that require the knowledge and experience of our research team. The more we know about the underlying business than the average market participant,

FIGURE 2: CONTINGENT CLAIMS CONCEPT

Source: *Convertible Arbitrage* (page 82), by Nick P. Calamos, CFA

the better we can exploit market inefficiencies in our goal to produce alpha. Some of these factors include:

> **Business valuation and economic profits:** sustainability and quality of cash flows, returns on invested capital, and growth drivers. Our analysis of the business valuation is paramount in our qualitative analysis and is driven by our cash flow focus. Ultimately, it is the cash flows that repay a firm's obligations and drive the valuation process of each security in the capital structure.

> **Liquidity and balance sheet flexibility:** availability of revolving credit lines, debt agreement covenant compliance and flexibility, debt maturity profile, internal capability to generate funds, external capital markets access, true cash position (ability to repatriate cash), future capital expenditure requirements, lease obligations.

> **Management issues:** historical balance sheet management, strategy plans and execution, historical focus on equity versus debt holders, ownership (e.g., public versus private or big insider ownership), accounting methodologies, capacity for innovation, labor relations, management changes and experience.

> **Acquisitions:** consistency with strategy, how much was paid, how acquisitions were funded, history of successful integrations.

> **Industry characteristics:** suppliers, customers, concentrations, market share, brands, competitors and competitive advantages, commodity versus value-add products and services, cyclical versus non-cyclical, barriers to entry.

> **Other:** catalysts for credit improvement, global diversification, or the use of proceeds from capital offerings, such as acquisitions, refinance debt, equity buybacks, etc.

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Pricing Credit Risk

Finally, once we believe we understand a company's risk, we still must determine how to price the credit risk and decide if we are being compensated for taking on those risks. We take several different approaches to pricing. For example, we believe the pricing of corporate bonds should be composed of the expected pricing from a risk-free security with similar maturity combined with the expected pricing (or returns) on the equity or common stock. Our rational is that corporate debt is a composition of a risk free asset, which is the expected full recovery portion of a bond in bankruptcy, and common stock, which in a bankruptcy should theoretically have no recovery. For this reason, we conduct a recovery analysis on the debt by examining the balance sheet assets and factor in a partial loss of principal in a bankruptcy liquidation. We further analyze recoveries by assessing potential going-concern firm valuations by reviewing multiples of sales numbers or EBITDA (earnings before interest, taxes, depreciation and amortization). The analysis includes an assessment of EBITDA and sales quality as well as sustainability, priority of claims in the capital structure, and current market conditions.

Another pricing tool incorporated into our analysis uses the aforementioned contingent claims model. This model allows us to calculate a firm's probability of default, which when incorporated with the recovery analysis, can provide another pricing view.

Summary

Credit analysis is an integral part of our investment process. In the end, our credit analysis process is used in conjunction with risk management, long-term secular top-down themes, a security's risk/reward and return analysis, strategy risk appetites, and portfolio construction considerations (e.g., sector/industry participation and position size) when analyzing the suitability of an investment in a diversified portfolio for long-term investors.

TERMS

Current ratio: An indication of a company's ability to meet short-term debt obligations; the higher the ratio, the more liquid the company. Current ratio is equal to current assets divided by current liabilities.

Debt-service coverage ratio: A measurement of a property's ability to generate enough revenue to cover the cost of its mortgage payments. It is calculated by dividing the net operating income by the total debt service.

Debt to total capital ratio: A measurement of how leveraged a company is. The ratio compares a firm's total debt to its total capital. The total capital is the amount of available funds that the company can use for financing projects and other operations. It is calculated by dividing debt by the sum of debt and stockholders' equity. A high debt-to-capital ratio indicates that a high proportion of a company's capital is comprised of debt.

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