

NOVEMBER 2010 DEFAULT CASE STUDY

Public Firm: C&D Technologies Inc (CHHP) Private US Bank: Darby Bank & Trust Co

Overview

In this report, we analyze in detail one featured public company and one featured private US Bank that defaulted in November 2010.

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Public Firm: C&D Technologies Inc (CHHP)

Default Event

On November 1, 2010, C&D Technologies Inc announced that it would not make a semi-annual interest payment on its 5.25% Convertible Senior Notes due 2025.

Company Profile

C&D Technologies Inc makes reserve power systems and batteries, which can be found inside corporate data centers, factories, network operations centers, and nuclear power plants. Typical customers are companies in the cable, electric utility, and telecommunications industries. Emerson is behind about 13% of sales. C&D divested certain product lines to focus on the reserve power system market. Reserve power systems monitor electrical power usage and provide a source of backup power in the case of power failures and interruptions. C&D Technologies derives approximately three-quarters of its sales from US customers.

EDF Credit Measure and EDF Drivers

EDF (Expected Default Frequency) value as of November 1, 2010: 35.00%.

Traditional ratings, such as the ones used by the major rating agencies, are currently more commonplace than default probabilities. Therefore, to help facilitate users' understanding, we translate the EDF credit measure into an equivalent Credit Category. C&D Technologies Inc's Credit Category (not an agency rating) at default was C.

Figure 1. One-Year C&D Technologies Inc's EDF Values.

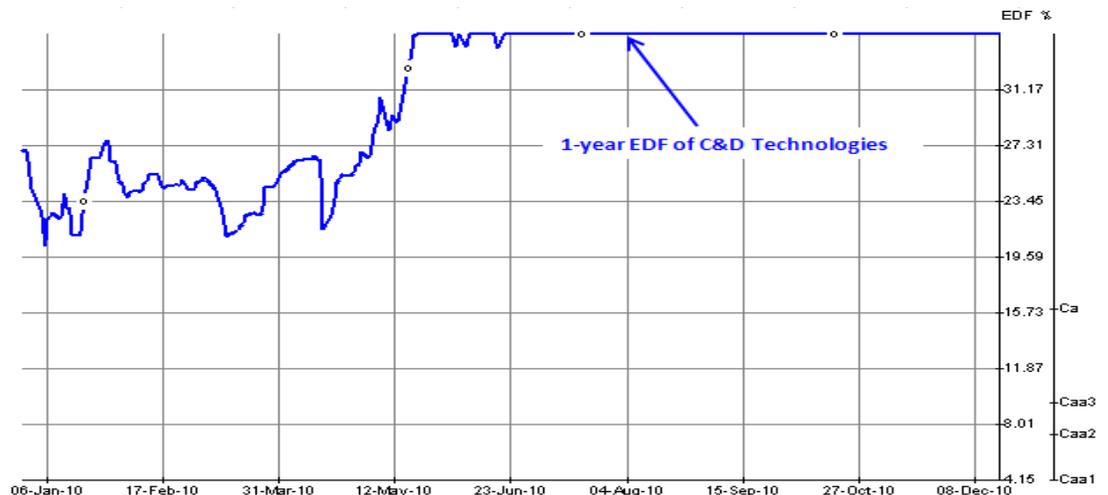


Figure 1 shows that C&D Technologies Inc's EDF credit measure has been rising since March 2010 and reached 35% in May 2010, six months prior to its default.

Figure 2. Drivers of C&D Technologies Inc's EDF Values

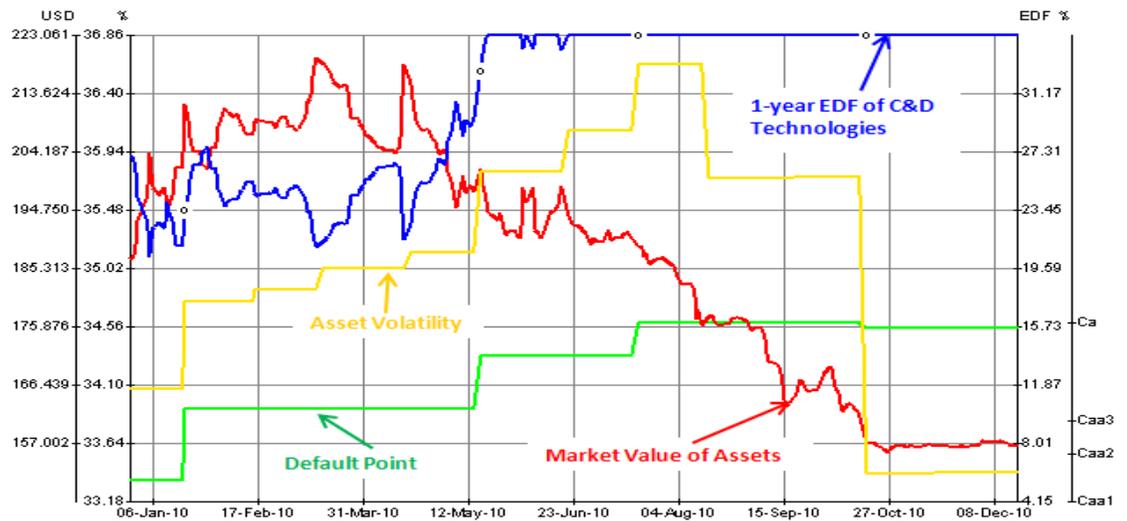


Figure 2 shows the time series of EDF values and EDF drivers, which includes market value of assets, asset volatility, default point, and market leverage. **Table 1** summarizes the definition of EDF drivers.

In February 2010, the market value of assets was \$210 million. Under the pressure of a competitive battery market and the failure of clients to renew supply agreements, the company's market value of its assets plummeted to \$157 million in October 2010, which was lower than the default point of \$176 million in October 2010. The company's asset volatility has been high, between 33% and 36%, since January 2010. Shrinking business value and high financial risk together led the company to default.

Table 1. Drivers for EDF Values

EDF DRIVERS	DEFINITION
Market Value of Assets	The market's view of the enterprise value of the firm as determined by the firm's equity value, equity volatility, and liability structure
Default Point	The liabilities that matter in case of default. If the market value of assets falls below this value, it is assumed that the firm will be unable to sell assets or raise additional capital to pay its debt. A firm's default point is a value close to its short-term liabilities plus half of its long-term liabilities
Market Leverage	Ratio indicating how much of the market value of assets is financed by debt. It is calculated as the default point/market value of assets
Asset Volatility	Standard deviation of the annual change in the market value of the assets

The two main drivers of EDF values are: asset volatility and market leverage. **Figure 3** depicts a meter showing the level of risk on each of the two measures. The levels are relative values computed on the United States and Canada Small & Mid-Size Corporates group.

Figure 3. United States and Canada Small & Mid-Size Corporates



- » **Asset Volatility.** EDF credit measures for United States and Canada Small & Mid-Size Corporate issuers such as C&D Technologies Inc reflect an average of asset volatility levels over the past three years. As of the default date, C&D Technologies Inc's asset volatility was 33.40%, in the 10th percentile relative to the US and Canada Small & Mid-Size Corporates Group.
- » **Market Leverage.** C&D Technologies Inc's market leverage is 112.23%, in the 99th percentile of the entire US and Canada Small & Mid-Size Corporates Group.

Relative Analysis

The relative analysis feature allows users to chart EDF, fundamental data, and bond values for a selected company or group relative to other companies and/or groups. Users may manually select their own list of peer companies or groups for comparison, or view a Moody's Analytics predefined peer list, based on an automated algorithm. To determine peers for each company, Moody's Analytics finds all the companies that share the company's Bloomberg Subgroup. Users can also customize and save their own peer company and peer group choices for future use.

Figure 4. One-year C&D Technologies Inc vs. US Electrical Equipment Group

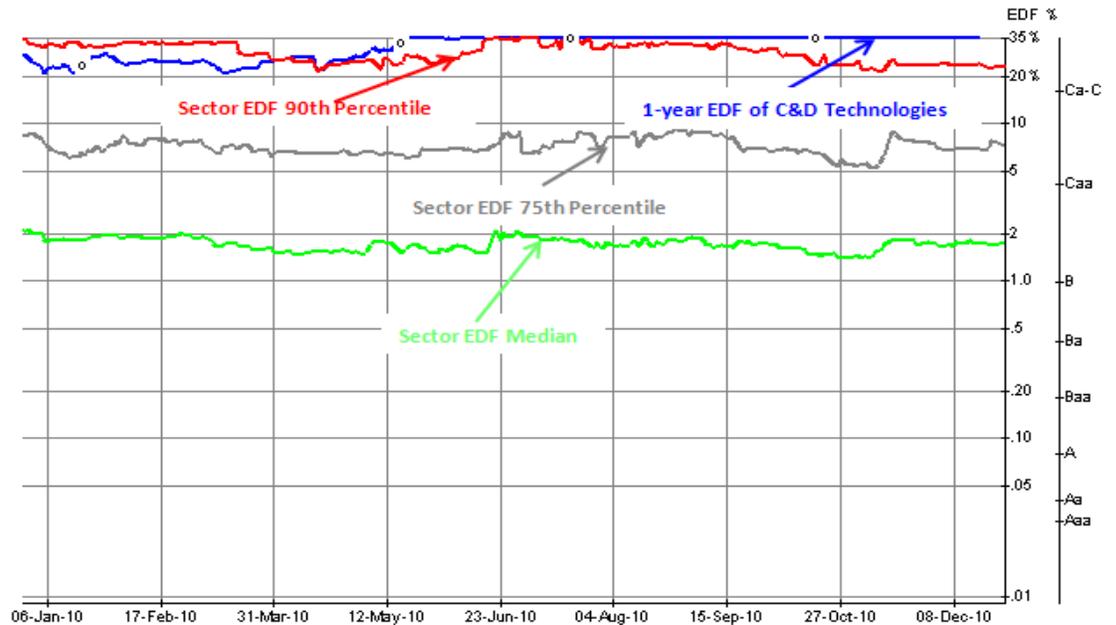


Figure 4 shows C&D Technologies Inc's EDF value had been above the 90th percentiles of the US Electrical Equipment Group since March 2010. The company defaulted in November 2010.

Conclusion

C&D technologies Inc's EDF Credit Measure indicated high default risk before default occurred. Firm EDF values have remained above the 90th percentiles relative to the US Electrical Equipment Group since March 2010. Shrinking business value and high financial risk together led the company to default.

Private US Bank: Darby Bank & Trust Co

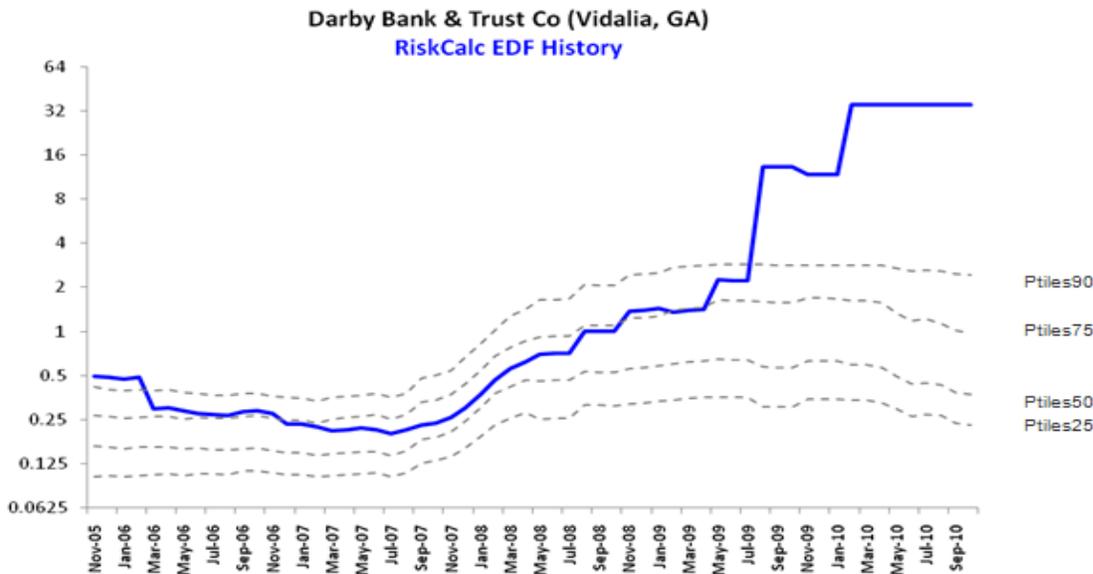
Company Profile

Darby Bank & Trust Co (Vidalia, GA) is a full-service bank. The bank accepts deposits, makes loans, and provides other services for the public. As of September 30, 2010, Darby Bank & Trust Co. had total assets of \$654.7 million and total deposits of \$587.6 million. To protect depositors, the FDIC entered into a purchase and assumption agreement with Ameris Bank (Moultrie, GA) to acquire the banking operations, including all the deposits of Darby Bank & Trust Co.

1-Year RiskCalc™ EDF credit measure: 35.00%

As Darby Bank & Trust Co does not have common stock outstanding, we can assess its default risk using RiskCalc v3.1 US Banks Model. The model assesses the risk of banks, savings and loans, and thrifts as well as bank holding companies. We construct the RiskCalc v3.1 US Banks model using data collected from the FDIC's Research Information System and the Federal Reserve Bank's data.

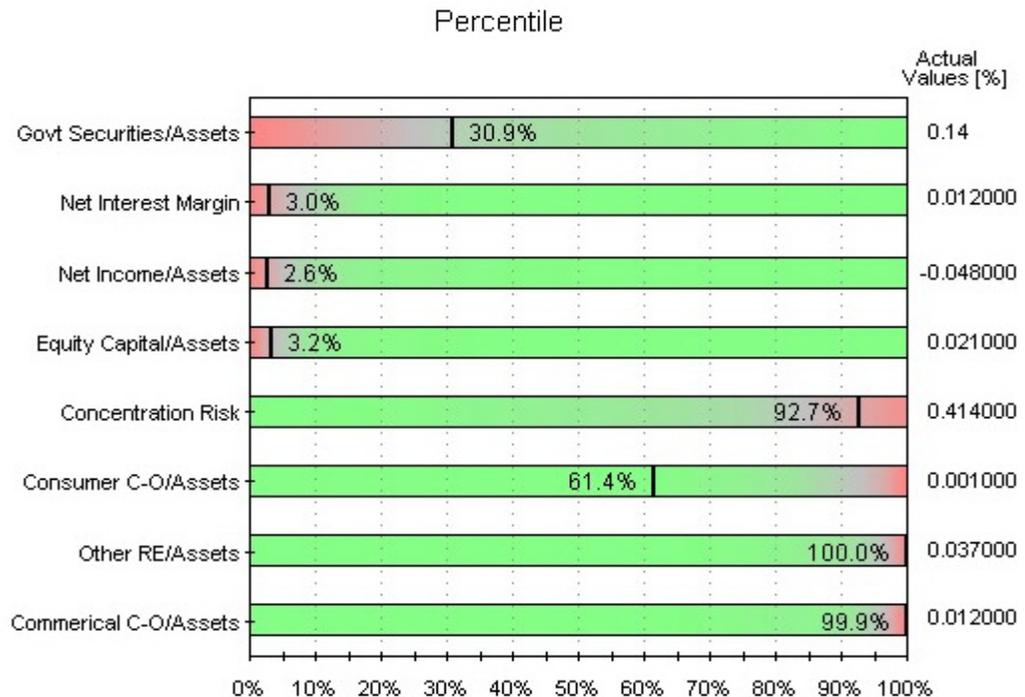
The blue line shows movement in the **RiskCalc EDF values**, and the dotted lines are the time series of the RiskCalc EDF percentiles of the banks run through RiskCalc Plus V3.1 US Banks.



Percentile, Relative Contribution, and Relative Sensitivity Graphs

The Percentile, Relative Contribution, and Relative Sensitivity Graphs in RiskCalc Plus v3.1 US Banks help us understand what drives the bank's EDF credit measure.

The **Percentile Graph** provides a visual representation of how each of the bank's ratios compares with those of private US banks used to build the RiskCalc v3.1 US Banks model.

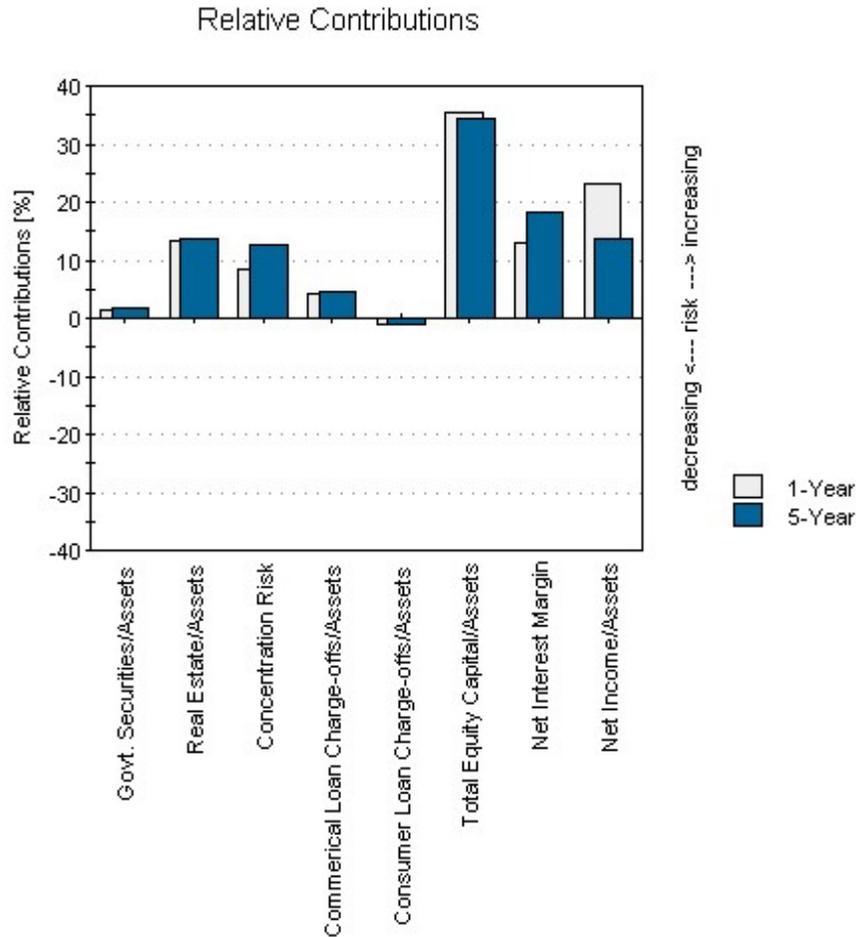


The Percentile Graph plots the percentile of each ratio and provides the actual value in the right-hand column. The colors **RED**, **LIGHT GRAY**, and **GREEN** correspond to the risk level, **HIGH**, **MEDIAN**, and **LOW** associated with the specific value of the ratio.

For example, in the right-hand column we observe that *Commercial Loan Charge-offs to Assets* and *Other Real Estate Owned to Assets* placed in the 100th percentile and solidly in the red in terms of risk. *Equity Capital to Assets*, *Net Income to Assets*, and *Net Interest Margin* are also solidly in the red in terms of risk.

The Percentile Graph does not consider the weight the model places on each ratio in determining the EDF level.

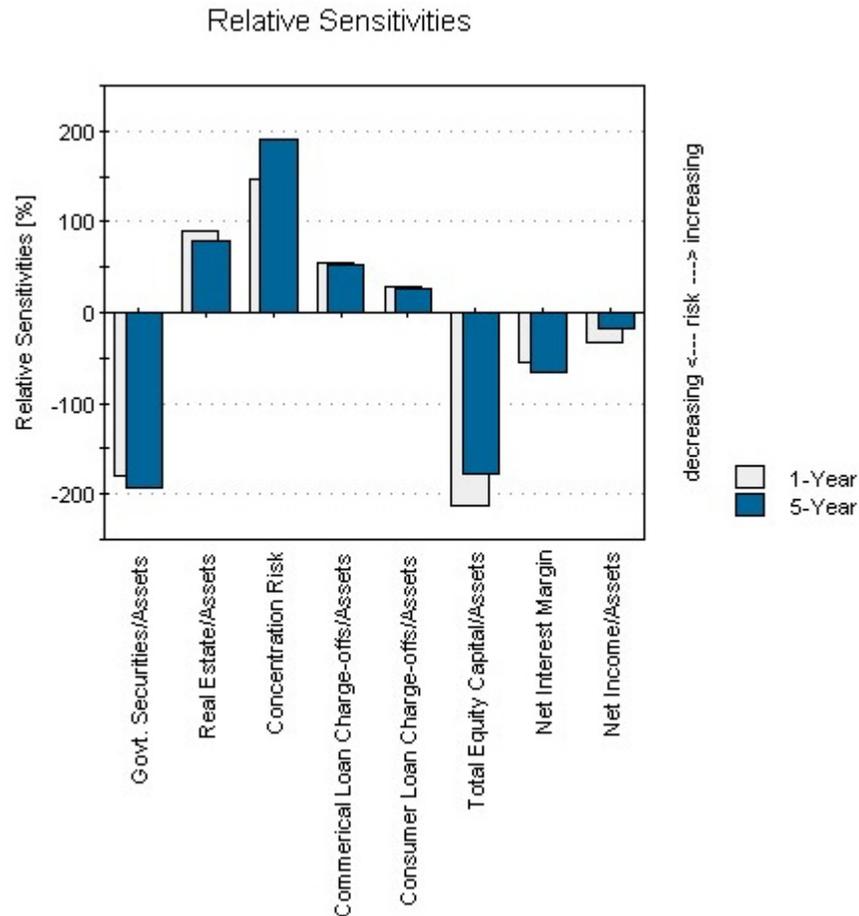
The **Relative Contribution** graph is helpful in identifying the bank's financial strengths and weaknesses with respect to default risk.



The Relative Contribution graph explains how each ratio moves the bank's EDF level away from the average banks used in the model's development. Relative Contributions are expressed relative to one another.

Total Equity Capital to Assets and *Net Income to Assets* are the strongest ratios pulling up Darby Bank & Trust Co's EDF level relative to the average EDF level, 35.31% and 23.22%, respectively. *Government Security Muni and MBS to Assets*, *Concentration Risk*, *Commercial Loan Charge-offs to Assets*, *Real Estate Owned to Assets*, and *Net Interest Margin* boost the EDF level as well.

The **Relative Sensitivities** graph indicates the relative impact that a small increase in a ratio would have on the EDF level, all else being equal.



In the Relative Sensitivity analysis, we set the reference point to be the average absolute change in the bank's EDF level when each ratio is given a small shock. The magnitude of a ratio's Relative Sensitivity is expressed as a multiple of the average sensitivity across the ratios.

Darby Bank & Trust Co's EDF level is most sensitive to changes in *Total Equity Capital to Assets*, *Government Security Muni and MBS to Assets*, *Net Income to Assets*, and *Net Interest Margin*. They each have a negative Relative Sensitivity, meaning that a decrease in any of these ratios would lead to an increase in the bank's EDF level. *Concentration Risk* has the most positive Relative Sensitivity. An increase in the *Real Estate Owned to Assets*, *Consumer Loan Charge-offs to Assets*, and *Commercial Loan Charge-offs to Assets* would also increase the EDF level.

The magnitude of Relative Sensitivity of *Total Equity Capital to Assets* is -211.69%, which means that shocking the bank's *Total Equity Capital to Assets* leads to an EDF level change 2.12 times the size of the average EDF level change from shocking any ratio.

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