

## EDF Case Study: Worldcom

WorldCom, which has \$104 billion in assets, overshadowed collapsed energy trader Enron as America's largest bankruptcy.

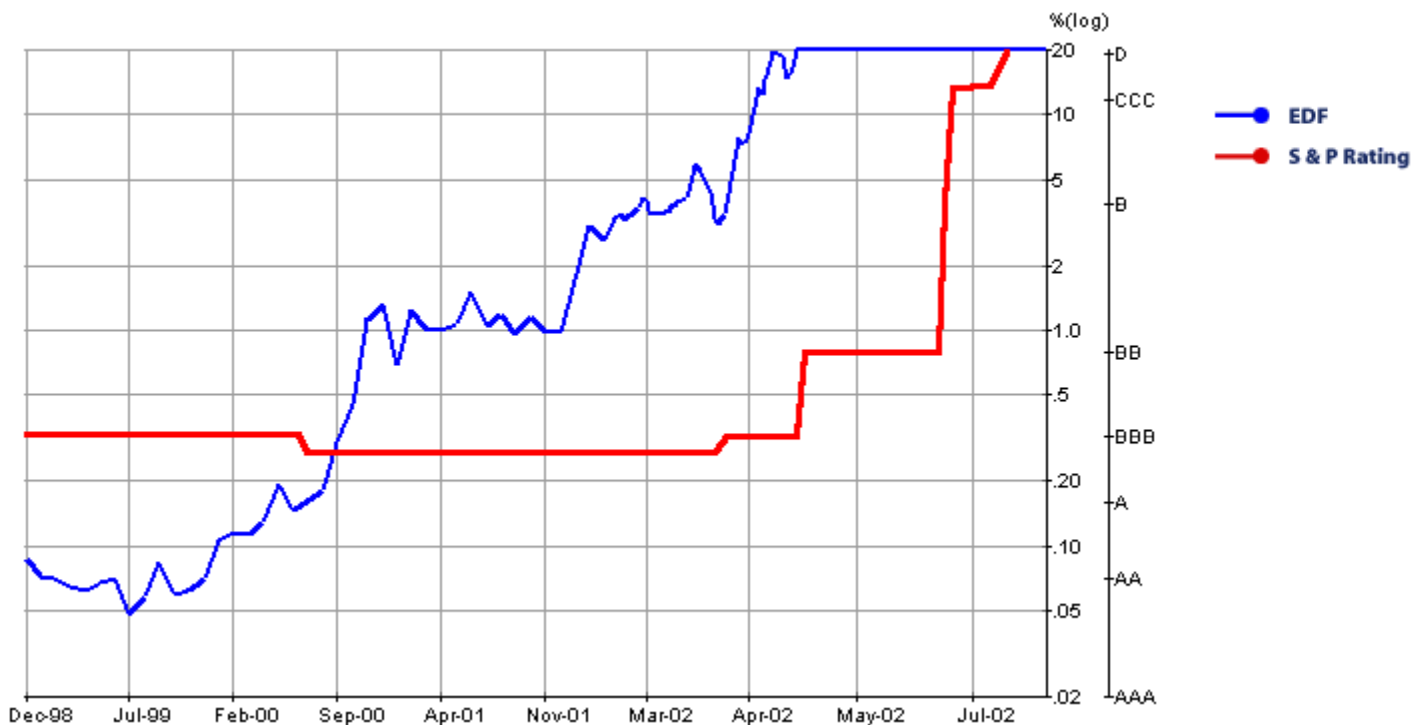
### 1 Vertical scale is logarithmic

- Seemingly small movements for high-risk companies can be very substantial.

- EDF credit measures range from a low of 0.02% to a high of 20% in one basis-point increments. A basis point = 1/100 of a percentage point.

- EDF credit measures are *actual* probabilities, not credit scores. A company with a current EDF credit measure of 2% has a 2% probability of defaulting within the next twelve months. That is, out of 100 companies with a 2% EDF credit measure, we would expect, on average, that 2 would default over the next twelve months. Also, a company with a 2% EDF credit measure is 10 times more likely to default than a firm with a 0.20% EDF credit measure.

### 2 Letter ratings are for comparison purposes only--a point of reference to improve interpretation of default probabilities.



## 1998

- WorldCom merges with MCI Communications, a deal worth \$40 billion, the largest in history at that time
- At the end of 1998, debt was \$32.8 billion

- Share price \$71.75

- **EDF Credit Measure 0.09%, equivalent to AA- rating**

## 2000

- Regulators block a proposed merger with Sprint
- At the end of 2000, the share price had decreased to \$14
- **EDF Credit Measure rises to 1.33%, an 1,800% jump from 1999**

## March 11, 2002

- The SEC inquires about accounting procedures and loans to officers
- Market leverage increases to 41%
- **EDF Credit Measure increases to 1.98%**

## April 3, 2002

- WorldCom cuts 3,700 jobs.
- **EDF increases to 3.72%, equivalent to B rating**

## April 22-23, 2002

- Standard & Poor's, Moody's and Fitch all cut WorldCom's credit ratings
- **EDF is 7.72%, more than double from the previous month**

## April 30, 2002

- CEO Bernard Ebbers resigns; Vice Chairman John Sidgmore becomes CEO
- **EDF is 12.27%, increasing almost 60% in just one week**
- Share price is \$2.47, falling 27% from the previous week

## May 9-10, 2002

- Moody's and Standard & Poor's both cut WorldCom's rating to junk status
- Market cap falls to \$4.7 billion while liabilities remain at about \$31 billion, the same level of debt as 3 years ago
- Market leverage rises to 78%
- **EDF Credit Measure rises to 20%**

## May 13, 2002

- S&P 500 Index removes WorldCom
- S&P agency rating is BB

## May 15-June 5, 2002

- WorldCom negotiates with lenders and announces cost-cutting moves
- Asset volatility is 28%
- Market leverage is 80%

## June 25, 2002

- CFO is fired for improper accounting of some \$4 billion in expenses
- Market cap falls another 47% in one week
- Market leverage is 92%

## July 15, 2002 Default

- On the brink of bankruptcy, WorldCom misses three interest payments totaling \$79 million

## July 17, 2002

- S&P downgrades WorldCom's rating to D

## July 21, 2002 Bankruptcy

- WorldCom files for Chapter 11, surpassing Enron as the largest bankruptcy ever in the U.S.
- KVM records the bankruptcy