

Table of Contents

1	Introduction	1
2	Related Literature	5
2.1	Characteristics of Physical Recovery Rates	5
2.2	On the Estimation of Implied Recovery Rates	8
2.2.1	The Identification Problem	8
2.2.2	A Review of Earlier Studies.....	11
3	A New Approach to Estimating Market-Implied Recovery Rates	19
3.1	A Default-Free Metric of Implied Recovery	19
3.2	The Link to Capital Structure	21
3.3	The Implied Probability Distribution of Recovery	23
4	A Review of Appropriable Credit Derivatives.....	27
4.1	Credit Default Swaps on Corporate Debt.....	27
4.2	Leveraged Loans and Bonds.....	30
4.2.1	Origination, Information, and Transferability.....	31
4.2.2	The Structure of Leveraged Loans.....	32
4.2.3	Collateral and Covenants	33
4.2.4	Coupons and Prepayment.....	34
4.3	Standard Terms of Single-Name Credit Default Swaps.....	35
4.3.1	Framework Documentation.....	35
4.3.2	Investors' Requirements	37

4.3.3	Reference Entity and Reference Obligation.....	37
4.3.4	Contract Cancellation.....	40
4.3.5	Credit Events.....	41
4.4	Key Topics Revisited.....	46
5	Implementation and Results.....	51
5.1	Data and Descriptive Statistics.....	51
5.1.1	Construction of Samples	51
5.1.2	Credit Default Swap Premia	53
5.1.3	Capital Structure Data.....	55
5.2	Empirical Specification	58
5.2.1	The Ratio of Premia	58
5.2.2	Linking the Implied Distribution to Economic Factors	60
5.2.3	Calibration Results.....	64
5.3	Estimation Results of Market-Implied Recovery Rates	66
5.3.1	Implied Firm-Wide and Instrument-Specific Recovery Rates.....	66
5.3.2	The Impact of Debt Cushion.....	69
5.3.3	The Impact of Changes in the Economic Environment	71
5.3.4	The Relation to Ratings.....	72
5.4	Robustness	74
5.4.1	Alternative Parameterization.....	74
5.4.2	Sample-Specific Calibration	76
5.4.3	Risk Aversion in Implied Recovery Rates.....	77
5.5	Application: Deducing the Implied Probability of Default	80
5.5.1	A Simplistic Approach.....	80

5.5.2	The Relation to Implied Expected Recovery Rates	83
5.5.3	Risk Aversion in the Implied Probability of Default	84
6	Conclusion and Outlook.....	87
Appendices		91
A	Supremum and Infimum Standard Deviations	91
A.I	Beta Distribution	91
A.II	Transformed Normal Distribution	92
A.III	Quadratic Distribution.....	94
B	Descriptive Statistics by Firm.....	97
C	The Variance of Implied Expected Recovery Rates.....	101
D	Implied Recovery Rates by Firm.....	102
E	Implied Recovery Rates by Firm – Sample-Specific Calibration	104
F	Implied One-Year Probabilities of Default by Firm.....	106
References		107