

GUIDE TO THE

Dow Jones Corporate Bond Index

Dow Jones Corporate Bond Index

TABLE OF CONTENTS

I	INTRODUCTION	3
II	KEY FEATURES	3
	2.1. Base Date and Base Value	3
	2.2. Calculation	3
	2.3. Methodology	4
	2.4. Dissemination	6
	2.5. Weighting	6
III	INDEX CONSTRUCTION	6
	3.1. Defining the Index Universe	6
IV	PERIODIC REVIEW	6
	4.1. Index Composition	6
	4.2. Selection Process	7
	4.3. Implementation	7
	4.4. Bonds in Financial Distress	7
	APPENDIX A	8
	Total Rate of Return Calculation Methodology	8

Dow Jones Corporate Bond Index

I. INTRODUCTION

The Dow Jones Corporate Index (DJCI) reflects the market performance, on a total-return basis, of investment-grade bonds issued by companies in the U.S. Corporate Bond market. Developed by Ryan Labs, one of the world's leading providers of bond market analytics and fixed-income portfolio management services, this 96-bond index was designed to minimize the pricing and liquidity problems associated with most corporate bond indexes.

Ryan Labs developed this benchmark index series based on its proprietary research that showed interest-rate risk is the dominant factor determining the risk/reward behavior of investment-grade bonds, accounting for more than 90% of a corporate-bond portfolio's total risk. Because this risk is best measured and viewed by the term structure, or yield curve, of the portfolio, Ryan Labs created a series of corporate-bond yield curve brackets at maturities of two, five, ten and thirty years, and a composite index. The DJCI is further subdivided into Industrial, Utilities/Telecom, and Financial sector indexes, each of which also has a yield curve index series.

II. KEY FEATURES

2.1 Base Date and Base Value

The base date for the DJCI is December 31, 1996; the corresponding base value is 100. Historical total-return index values have been calculated back to the base date.

2.2 Calculation

2.2.1 Index Formula

Total returns are calculated daily for the DJCI. The index value is the compounded result of the cumulative daily returns where the starting value of the index is equal to 100 on its inception date. For example, if the index had a -0.12% return on its first day after the base date, the index values for the first day would be $100 \times (1 - 0.0012) = 99.88$.

A detailed explanation of the total return calculation is provided in Appendix A.

2.2.2 Input Data

- ▶ Daily bond prices are obtained from leading fixed-income data vendors. Prices at closing time for bond futures, the market standard (3:00 p.m., New York Time), are used for index calculation.
- ▶ To avoid problems associated with market-weighted bond indexes, the Dow Jones Corporate Index and its subindexes are equal-weighted. The daily total return of each index is the average of the daily returns of all component bonds.

Dow Jones Corporate Bond Index

2.2.3 Weekends and Holidays

Because bonds accrue interest daily (except on the 31st day of a month for corporates), a daily bond index should calculate an income return for weekends and holidays to be an accurate daily index. On weekends and holidays, the previous day's closing price for each affected bond is used for index calculation.

2.3 Methodology

2.3.1 Maturity Cells

The DJCI has four maturity cells and a composite index.

2 year	=	1.50 - 3.49 years
5 year	=	3.50 - 7.49 years
10 year	=	7.50 - 17.49 years
30 year	=	17.50 + years

2.3.2 Sectors

The selection universe for the DJCI consists of all U.S.-issued corporate bonds rated Baa or better by Moody's Investors Service. Bonds that qualify for inclusion in the universe are then classified into investment sectors, based on their Industry classifications under the Industry Classification Benchmark (ICB) system maintained by Dow Jones Indexes and FTSE Group. Detailed information on the ICB may be obtained on the ICB Web site at www.icbenchmark.com. Currently the DJCI has three sectors:

- ▶ Financial
- ▶ Utilities/Telcom
- ▶ Industrial

The Financial sector, which corresponds to the ICB Financial Industry, includes banks, insurance companies and financial services companies. The Utilities/Telcom sector, which contains the ICB Utilities and Telecommunications Industries, includes gas companies, electric companies, water companies, and

Dow Jones Corporate Bond Index

both fixed-line and mobile telephone companies. The Industrial sector includes companies in the ICB Oil and Gas, Basic Materials, Industrials, Consumer Goods, Health Care, Consumer Services and Technology industries.

The combination of maturity cells and industry sectors provides three industry sector yield curve index families and a Composite Index yield curve, created from the 20 separately calculated indexes underlying the DJCI family, as shown in the following table:

Composite	Industrial	Utilities/ Telecom	Financial
2 year	2 year	2 year	2 year
5 year	5 year	5 year	5 year
10 year	10 year	10 year	10 year
30 year	30 year	30 year	30 year
Total	Total	Total	Total

2.3.3 Constraints

- ▶ Bonds must be issued in U.S. dollars.
- ▶ No issuer can appear more than once in a maturity cell.
- ▶ In order to enter a maturity cell, a bond's remaining time to maturity must be at least six months longer than the minimum maturity horizon for that cell. A bond already in a cell may remain until the end of the month prior to the month its maturity would fall below the Index's minimum.
- ▶ Only option-free (bullet bonds) are eligible. Structured notes, bonds with embedded puts, and bonds with call provisions and sinking funds are excluded from the index. Make-whole bonds are included because they do not have scheduled call dates and the redemption feature is not interest rate driven.
- ▶ A bond must retain its investment-grade rating to remain in the index.
- ▶ Zero coupon corporate bonds are excluded to avoid average statistics distortion.
- ▶ Must be SEC registered. 144A, convertible, preferred securities are excluded.
- ▶ Bonds are selected at month end.

Dow Jones Corporate Bond Index

2.4 Dissemination

The DJCI index return and statistics are available at approximately 5:30 p.m. Eastern Time.

2.5 Weighting

All issues in the DJCI are equally weighted in the maturity cells, the industry sectors and the overall index. The Total Composite Index will at all times contain 96 bonds, with 32 bonds in each industry sector and eight bonds in each maturity cell. For example, a two-year industrial sector bond has a weight of one-eighth in its sector maturity cell, one-twenty-fourth in its composite maturity cell and one-thirty-second in the industrial sector. That bond also has a weighting of one-ninety-sixth of the composite index.

III. INDEX CONSTRUCTION

3.1 Defining the Index Universe

- ▶ All corporate bonds that meet the constraints are included in the selection universe for the DJCI.
- ▶ An issuer can have no more than one bond in each maturity cell in its sector. An issuer may have up to four bonds in each sector, but no more than one in each maturity window.

IV. PERIODIC REVIEW

4.1 Index Composition

Because Ryan Labs testing showed that the key issues of each maturity were the largest, most liquid issues, index composition is reviewed at month-end to take into account changes in the marketplace, with the goal of holding in the index the eight largest and most liquid bonds per maturity for each industry for the following calendar month. All issues in the DJCI would remain in the index until the month-end review, regardless of market condition changes. Factors involved in the review process include:

- ▶ New issues
- ▶ Credit rating changes
- ▶ Maturity of the issues
- ▶ Changes in outstanding amounts

Dow Jones Corporate Bond Index

4.2 Selection Process

- ▶ A new issue needs to be announced by the 25th of the month and settled by month-end in order to be a candidate for the index.
- ▶ The review process starts with a complete new search for qualified issues to reflect the above-mentioned changes in the market.
- ▶ After the qualified issues have been selected, they are compared with the current issues so that at month-end new issues are being added to the index and the replaced issues are dropped from the index.

4.3 Implementation

- ▶ Because the daily total return of the DJCI is an equally weighted average of the daily total returns of all bonds in the index, replacing a bond does not require a divisor adjustment. If a bond is to be replaced at month-end by another bond, the old bond's total return is used to determine the total return of the index on the last day of the month.
- ▶ The new bond replaces the old bond after the month-end total return figures are disseminated. The new bond is used to construct the month-end yield curve for the DJCI.
- ▶ On the first day of the new month, that day's total return from the new bond is used to calculate the daily total returns for the DJCI.

4.4 Bonds in Financial Distress

- ▶ Dow Jones reserves the right to remove any issue from the index at any time in response to any news that would adversely affect the solvency and liquidity of that issue. If such an event (including but not limited to a bankruptcy filing or a cut in the bond's rating that drops it below investment grade) occurs, the securities that are removed will not be replaced in the index until the next month-end index rebalancing.

Dow Jones Corporate Bond Index

APPENDIX A:

Total Rate of Return Calculation Methodology

1. Beginning Principal = (Beginning Price X Par Value)/100
2. Beginning Value = Beginning Principal + Beginning Accrued Interest
3. Ending Principal = (Ending Price X Par Value)/100
4. Ending Value = Ending Principal + Ending Accrued Interest + Cash Flow (if there is any)
5. Total Return = (Ending Value/Beginning Value-1) *100

The following table shows an example of the calculation of a three-bond index and the replacement of one bond with another.

Bond D Replaced Bond A After Month-End Index Calculation				
List of Bonds	Total Return 12/21/XX	Total Return 1/1/XX	List of Bonds	Total Return 1/2/XX
Bond A	0	0.03	Bond D	0.04
Bond B	0	0.04	Bond B	0.05
Bond C	0	0.05	Bond C	0.06
Bond Index				
Total Return	0	0.04		0.05
Bond Index	100	104.00		109.20

What is Ryan Labs?

Ryan Labs is a fixed-income asset manager based in New York City. The firm is also a leader in index creation and publication of fixed-income indexes. Ryan Labs is an innovator in the area of bond indexes: Cash, GIC, Treasury, Agency, Corporate, Preferred Stock and Liability indexes. If you have any questions, please contact:

Greg Finkelman, <i>Index Analyst</i>	646.708.8042
Zack Matos, <i>Operations Manager</i>	646.708.8050
Geraldine Michalik, Ph.D., <i>Director of Credit Research</i>	646.708.8054
Sean McShea, <i>President</i>	646.708.8052
Fax:	212.635.2309

Dow Jones Corporate Bond Index

To discuss licensing possibilities, please contact us at:

▶ **Americas**

tel: +1 609 520 7172

▶ **Europe**

tel: +49 69 9714 2890

▶ **Asia**

tel: +85 2 2831 2850

For general inquiries, contact us at:

▶ **Dow Jones Indexes**

P.O. Box 300

Princeton, NJ 08543

tel: +1 609 520 7799

fax: +1 609 520 7030

www.djindexes.com

All information as of August 31, 2005.

*"Dow Jones", "Dow Jones Indexes" and all index names cited are service marks of Dow Jones & Company, Inc.
©2006 Dow Jones & Company, Inc. All Rights Reserved.*