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Tracing the Origins of “Investment Grade”

Overview

A notable feature of modern credit markets is the distinction between bonds that are rated investment grade (or “high grade”) and those that are assigned to a speculative-grade (or “high yield”) level. Because the distinction is so significant to the international capital markets, a review of its origins may prove informative to investors.

The term “investment grade” has its roots in both regulatory usage and market convention. Although the term appears to have taken hold as a result of financial regulations, it is now part of the fabric of today’s bond market.

Portfolio governance and prudential investment regulation form two parallel uses of the investment-grade concept. Many fiduciaries define their sole eligible investments as being those rated investment grade; moreover, major bond indices, established to assess investment performance, are often defined by the distinction. Consequently, bond funds are frequently characterized as having an *investment grade* orientation or guidelines.

Starting in the early 1930s, US banking and insurance regulations discouraged — and even prohibited — regulated entities from holding non-investment-grade securities. But several years passed before regulators settled on a precise definition of the term. The impact of the ruling on bond issuance is discussed below, followed by a discussion of the appropriateness of the choice of the rating divide separating investment grade and speculative grade.

Grading Bonds

The modern bond-rating industry can trace its roots to the 1909 publication of Moody’s Analyses of Railroad Investments.¹ John Moody’s bond rating system initially contained 14 rating categories: **Aaa**, **Aa**, **A**, **Baa**, **Ba**, **B**, **Caa**, **Ca**, **C**, **Daa**, **Da**, **D**, and **E**.² His *Key to the Bond Ratings*, found at the beginning of each volume, described every rating category in turn, often using the term “grade” to group the various ratings.³ [Please see the Appendix for a chronology of Moody’s rating definitions.]

In Moody’s earliest hierarchy, bonds rated **Aaa**, **Aa** or **A** constituted the “first-grade” or “high-grade” group; bonds rated **Baa** or **Ba** were described as “second-grade;” and bonds rated **B** or lower were considered “low grade.” Although obviously describing investment characteristics, Moody’s did not use the phrase *investment grade* to describe the groupings at this time.

During the 1920s and 1930s, Moody’s grading system variously classified bonds rated **A** as being either “high grade” or “medium grade.” Despite being classified as “medium grade,” bonds rated **Baa** contained a “speculative tinge;” those bonds rated **Ba** occupied a limbo-like “halfway position between sound investments and speculations.” From 1909 onwards, bonds rated **B** were associated with the word “speculative,” although the characterization “speculative class” was reserved for issues rated **Caa** or lower. As Moody’s competitors entered the ratings field, each followed roughly the same characterizations.⁴

1. Gilbert Harold, *Bond Ratings as an Investment Guide* (1938), p. 12.

2. An **F** rating was added for bonds in 1914, but both the **E** and **F** rating categories were retired in 1923. In 1930, Moody’s dropped the **Daa**, **Da** and **D** categories as well, thereby imputing relatively greater risk to the remaining lowest categories. From its inception, Moody’s Governments and Municipals rating scale terminated with the **C** rating.

3. Moody’s *Key to the Bond Ratings* sometimes differed across manuals for various sectors: Transportation, Industrials, Public Utilities and Governments.

4. Gilbert Harold, *ibid.*, Table 1, p. 74.



Investment Securities

Rapid market acceptance of bond ratings was demonstrated by their adoption throughout the private sector. Harold cites early uses by banks, investment houses, insurance companies, trust companies, investment trusts and individual investors.⁵ He lists several investment trusts that contained investment guidelines tied to Moody's ratings on underlying instruments.

Official usage of bond ratings appears to have begun with a regulation issued by the US Comptroller of the Currency on September 11, 1931.⁶ It specified that bonds rated **Baa**/BBB or higher may be carried at cost, but defaulted bonds and those of lower ratings had to be marked to market.

As defaults soared, the financial crisis of 1930-31 saw sharp deteriorations in the market values of corporate bonds. The exempt bonds became an attractive proposition because they spared banks from potential fluctuations (particularly deteriorations) in earnings — and subsequently capital. The rule applied as well to all Federal Reserve member banks, while state bank regulators adopted similar guidelines, thereby expanding the ruling to nearly all commercial banks.

By 1931, Moody's had three competitors: Poor's Publishing Company (first ratings issued 1916); Standard Statistics Company (first ratings issued 1922); and Fitch Publishing Company (first ratings issued 1924).⁷ The ratings of each would have provided a basis for the exemption.

Yet, confusion around the associated rating categories that were eligible for exemption appears to have persisted for several years, despite subsequent rulings by the Comptroller. From a footnote to the ratings key in the 1938 edition of *Moody's Industrial Manual*:

Effective Feb. 15, 1936, the Comptroller of the Currency issued further regulations governing National Bank purchases of investment securities. Under the Federal Reserve Act, the same regulations will govern all Federal Reserve member banks.

One of the regulations refers to the quality of securities which it is legal for such banks to buy. Section II, paragraph (3), with its footnote, reads as follows:

"The purchase of 'investment securities' in which the investment characteristics are distinctly or predominantly speculative, or 'investment securities' of a lower designated standard than those which are distinctly or predominantly speculative, is prohibited.* The purchase of securities which are in default, either as to principal or interest, is also prohibited."

"*The terms employed herein may be found in recognized rating manuals, and where there is doubt as to the eligibility of a security for purchase, such eligibility must be supported by not less than two rating manuals."

Reference to the definitions of Moody's Ratings will show that bonds rated **Baa**, while carrying some speculative elements, are not considered by Moody's to be "distinctly or predominantly" speculative. It will further be seen that bonds rated below **Baa** are considered by Moody's to be "distinctly or predominantly" speculative. Our understanding is that this ruling does not apply to U.S. Government and municipal obligations.

The *American Banker* interpreted the asterisked footnote somewhat differently, concluding that "bond investments would have to be confined to issues rated **A** or higher."⁸ In any event, confusion spawned by the footnote led to its deletion under a revision effective July 1, 1938.

To clarify matters, a joint statement of agreement, issued by the Secretary of the Treasury, the Board of Governors of the Federal Reserve System, the Directors of the Federal Deposit Insurance Corporation, and the Comptroller of the Currency on June 27, 1938 created four classifications of securities: Group I through Group IV.

The statement defined Group I securities as marketable obligations "in which the investment characteristics are not distinctly or predominantly speculative." Group II securities were those "in which the investment characteristics are distinctly or predominantly speculative" and included "general market obligations in grades below the four highest, and unrated securities of equivalent value." Group III securities were in default and Group IV applied to equities.

Moody's apparently succeeded in persuading regulators that bonds rated **Baa** are not "distinctly or predominantly speculative." Harold (1938) concurs, noting that the "recognition of bonds as 'investment grade' by the United States Comptroller of the Currency (and by most of the state banking Superintendents) goes no lower than the Baa rating."⁹ Interestingly, this 1938 usage of the term *investment grade* suggests that it had gained currency within both regulatory circles and the market at large by that time.

5. Gilbert Harold, *ibid.*, p. 20.

6. Gilbert Harold, *ibid.*, p. 27. See page 25 for discussion of an earlier "desirability weighting" scheme created by a New York Fed bank examiner that was based on bond ratings.

7. Gilbert Harold, *ibid.*, p. 12-13.

8. Gilbert Harold, *ibid.*, p. 30, citing *The American Banker*, p. 2, col. 4 (March 4, 1936).

9. Gilbert Harold, *ibid.*, p. 28.

Insurance Usage

Since its founding in 1871, the National Association of Insurance Commissioners (NAIC), in conjunction with the state insurance departments, has monitored the investment activities of licensed insurance companies. Its valuation arm (today the Securities Valuation Office) monitors ratings assigned by recognized bond-rating agencies and publishes its own rating assessments.

Since the early 1990s, the NAIC has employed a classification system spanning the numbers 1 through 6, each corresponding to certain bond-rating equivalents.¹⁰ NAIC classification 1 is defined as *Highest Quality* and corresponds to Moody's **Aaa** to **A3** ratings. Category 2 is referred to as *High Quality* and is equivalent to a Moody's **Baa** rating. Category 3, defined as *Medium Quality*, maps only to Moody's **Ba** ratings. The other NAIC categories span *Low Quality* to *In or Near Default*. According to Mulligan and Stone (1997), "Investment-grade bonds are typically those that are in the NAIC's Classifications 1 and 2."¹¹

But usage of the investment-grade concept by the NAIC appears to have evolved over a long time. According to Atkinson (1967):¹²

A similar determination of "investment grade" for insurance companies has existed since the early 1930s through ratings published by the National Association of Insurance Commissioners, although standards in terms of published rating grades have changed; only since 1951 has the favored classification been equated to the first four rating grades.

It is possible that insurance regulators adjusted their standards in order to conform to banking practices.

Consequence for Bond Issuance Uncertain

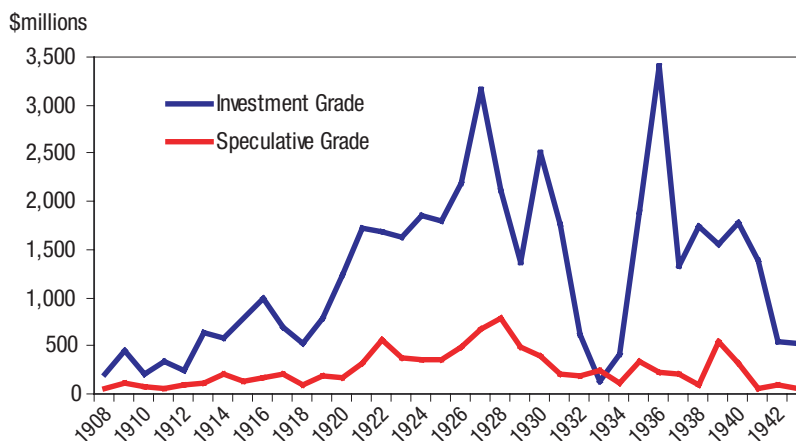
It seems reasonable to expect that the Comptroller's ruling would have had a severe market impact on the sub-investment-grade, or speculative-grade, sector. This should be observable as a decline in overall speculative-grade new issuance, relative to investment-grade issuance. The chart below, compiled from a 1960 compendium to W. Braddock Hickman's study (described in the next section), illustrates trends in annual new issuance from 1908–1943 by broad investment-grade and speculative-grade market segments.¹³

Bond issuance growth for the investment grade sector grew steadily from 1908 before peaking in 1927 at \$3.2 billion. Speculative-grade bond issuance rose at a gentler pace until it peaked in 1928 at \$784 million. The fall-off in issuance thereafter mirrors the onset of the Great Depression, with investment-grade issuance falling to \$135 million in 1933. Although investment-grade issuance rebounded up to the onset of World War II, speculative-grade bond issuance remained mired at relatively low levels, save for a small rally in 1939.

Because the timing of the Comptroller's ruling coincided with the on-set of the Great Depression, we cannot determine with confidence its impact, if any, on speculative-grade bond issuance.

Figure 1

Annual Bond Issuance by Agency Rating Category, All Industries, 1908 – 1943



Source: Hickman (1960)

10. Prior to this, the classifications spanned just three categories.

11. Elizabeth A. Mulligan and Gene Stone, *Accounting and Financial Reporting in Life and Health Insurance Companies*, Life Office Management Association (LOMA), 1997.

12. Thomas R. Atkinson, "Trends in Corporate Bond Quality," National Bureau of Economic Research (1967), p. 53.

13. W. Braddock Hickman, *Statistical Measures of Corporate Bond Financing since 1900*, Princeton University Press (1960), Table 52, p. 82.

Investment Grade

We showed above that Moody's did not characterize any particular rating category as belonging to an investment-grade or speculative-grade grouping. Thus, it appears that the term *investment grade* arose through market convention and then regulatory appropriation. We turn to perhaps the most authoritative historical study of the US corporate bond market for further guidance.

In 1946, the National Bureau of Economic Research initiated a comprehensive statistical study of the corporate bond market. Sponsored by the FDIC, the study examined financing and investment performance for the period covering January 1900 to January 1944. The primary author of the final project publications, W. Braddock Hickman, offered the following observation:

The most popular measures of prospective bond quality are the ratings assigned by the four investment agencies: Moody's, Fitch, Standard Statistics, and Poor's (the latter two were merged in 1941 and issued a single rating thereafter). Since there is a fair degree of uniformity among the ratings assigned by the investment agencies, it is possible to combine them into a single composite, which typifies the ratings assigned by the individual agencies. The composite rating used in this report is a median of individual coded ratings, where the rating I was assigned to the best grade under each system (i.e., Moody's Aaa, Standard Statistics A1+, etc.); the rating II to the next best grade (Moody's Aa, Standard's A1, etc.); and so on. Issues having composite grades I-IV in this system are usually considered to be of investment grade; that is, they are eligible for commercial bank investment, are fully "amortizable" for life insurance companies (are permitted to be carried on the companies' books at full amortized book value), etc. The lower grades (V-IX) are considered to be predominantly speculative by most investors.¹⁴

Hickman defined *investment grade* by referring to regulatory usage and defined *lower grades* by referring to investor preferences. Interestingly, he borrowed the phrase "predominantly speculative" from the Comptroller's ruling and thus avoided altogether the term *speculative grade*.

The Best Divide?

Hickman's published account of the investment performance of rating classifications was not finalized until the late 1950s, well after the *investment grade* moniker had entered general usage. His results therefore could not have been used to justify the choice of the **Baa/Ba** divide.¹⁵ But his findings help shed light on performance differentials between rating groups. Table 1 below shows the fraction of par value of bonds that went into default on or before 1944, by year of issuance and broad classification. Essentially, these are cumulative default rates with a time period that shortens through successive issuance years. Group I-IV corresponds to bonds rated **Aaa** through **Baa**, or their equivalent, and group V-IX corresponds to bonds rated **Ba** through **C**.

Table 1

Percent of Bonds Rated High and Low Grade at Offering That Went into Default before 1944, All Issues					
Year of Offering	Default Rates		Year of Offering	Default Rates	
	I-IV	V-IX		I-IV	V-IX
1908	14.4%	95.6%	1926	16.2%	45.5%
1909	28.6	76.3	1927	21.2	54.4
1910	20.5	18.9	1928	24.9	75.1
1911	41.4	66.9	1929	18.5	65.9
1912	36.8	82.9	1930	24.4	44.9
1913	46.2	45.7	1931	11.4	76.4
1914	26.2	38.5	1932	2.0	65.6
1915	23.4	48.6	1933	8.9	54.9
1916	29.1	29.4	1934	13.0	10.1
1917	15.3	43.7	1935	0.8	33.7
1918	14.1	50.5	1936	1.9	11.0
1919	4.6	35.0	1937	0.3	0.5
1920	11.7	56.0	1938	0.0	0.0
1921	6.1	44.8	1939	0.6	0.0
1922	10.9	27.3	1940	0.0	0.8
1923	8.0	18.0	1941	0.0	30.7
1924	21.6	19.9	1942	0.0	0.0
1925	12.7	38.6	1943	0.0	22.0

Source: Hickman (1958)

14. W. Braddock Hickman, *Corporate Bond Quality and Investor Experience*, Princeton University Press (1958).

15. An early default study by George W. Edwards, "Control of the Security-Investment System" *Harvard Business Review*, October, 1933, pp. 1-11, provided aggregate default rates by year of issuance.

Evident in Table 1 is the sharp drop in default rates for bonds issued during the 1934–1936 period. If we assume that differences in seasoning effects are minimal between the two groupings, we can compare average cumulative default rates across them. For the 1908 through 1935 period, the average cumulative default rate for group I-IV securities was 18.3%. Group V-IX's average cumulative default rate for the same period was 48.7%, or 2.7 times greater.¹⁶

Hickman's 1960 companion volume, *Statistical Measures of Corporate Bond Financing since 1900*, provided detail for the performance of individual rating categories over this period.¹⁷ We reproduce in Table 2 below part of Hickman's Table 186. For bonds issued between 1900 and 1919 that were assigned a rating of IV (**Baa**), the cumulative default rate by 1931 was 10.0%. For bonds rated V (**Ba**), the default rate was 42.3%. The difference in default rates for bonds issued between 1920 and 1931 is not particularly discernable until well after 1932.

Table 2

Default Rates on Regular Offerings 1900–1943, Classified by Agency Rating at Offering, by Selected Periods of Offering and Extinguishment Large Issues, All Industries								
Period		Rating						
Offered	Extinguished	I	II	III	IV	V	VI	VII-IX
1900-1919	1900-1931	1.5%	26.3%	9.7%	10.0%	42.3%	90.8%	100.0%
1900-1919	1932-1943	20.7%	23.1%	43.9%	18.6%	32.5%	29.4%	—
1920-1931	1920-1931	0.1%	4.0%	4.1%	6.8%	7.9%	17.8%	—
1920-1931	1932-1943	7.9%	3.7%	13.3%	39.9%	55.8%	70.2%	67.2%

Source: Hickman (1960)

To corroborate Hickman's results, we turn to Moody's default research. Moody's first study of corporate bond defaults appeared in July, 1989.¹⁸ Covering the years 1970 through 1988, that report provided default rates by rating category and by holding period. In 1996, coverage for the annual report card was extended back to 1938, and by 1997, it was extended back to 1920. Based on the earliest results, Table 3 below provides 1-year default rates, by rating category, for the 1920 to 1935 period, just as the turmoil from the Depression was easing.

Table 3

1-Year Default Rates, 1920–1935							
Year	Aaa	Aa	A	Baa	Ba	B	Caa-C
1920	0.00%	0.00%	0.33%	0.96%	2.16%	4.37%	—
1921	0.00%	0.19%	0.34%	0.64%	0.45%	2.69%	12.27%
1922	0.00%	0.19%	0.17%	1.11%	1.08%	1.73%	7.69%
1923	0.00%	0.00%	0.00%	0.61%	0.91%	2.32%	5.95%
1924	0.00%	0.37%	0.00%	0.12%	2.04%	2.79%	11.03%
1925	0.00%	0.00%	0.15%	0.71%	1.71%	2.54%	14.63%
1926	0.00%	0.46%	0.18%	0.14%	1.40%	2.05%	5.19%
1927	0.00%	0.00%	0.22%	0.00%	1.27%	1.87%	13.04%
1928	0.00%	0.00%	0.00%	0.00%	0.18%	1.25%	11.11%
1929	0.00%	0.30%	0.00%	0.43%	0.75%	0.88%	9.43%
1930	0.00%	0.00%	0.00%	0.42%	0.92%	2.90%	7.81%
1931	0.00%	0.00%	0.28%	1.04%	2.96%	9.22%	32.47%
1932	0.00%	0.67%	0.87%	0.89%	5.97%	13.79%	23.39%
1933	0.00%	0.00%	0.27%	1.80%	11.11%	15.92%	25.67%
1934	0.00%	0.60%	0.35%	0.81%	2.63%	4.31%	16.04%
1935	0.00%	0.00%	1.33%	1.89%	4.83%	4.17%	13.07%
16- Yr Average	0.00%	0.17%	0.28%	0.72%	2.52%	4.55%	13.92%
Multiple of Next Category Higher		N/A	1.62	2.58	3.49	1.80	3.06

Source: Moody's

16. A t-statistic of 6.66 suggests a significant difference in means at the 0.5% level.

17. See W. Braddock Hickman (1960), *ibid.*, p. 400.

18. Historical Default Rates of Corporate Bond Issuers 1970 – 1988, Moody's Investors Service (July 1989).

The data presented in Table 3 provide some support for choosing **Baa/Ba** as a reasonable investment-grade/speculative-grade cutoff. Fortunately, the average one-year corporate bond default rate for this period increases monotonically as the rating falls, even though within-year results are not always consistently ordered.

Moreover, the average one-year default rate for issuers rated **Ba**, at 2.52%, was 3.49 times the average for issuers rated **Baa** while the average **Baa** default rate, at 0.72%, was 2.58 times that for issuers rated **A**. Most striking is the **Baa/Ba** default rate gap during the years 1932–1933.

The relative difference in default rates between the **Baa** and **Ba** categories persists even today: results for the 1920 through 2002 period show **Ba** default rates averaging 4.18 times those of **Baa** issuers; the figure rises to 5.82 times for the 1970 through 2002 period. But this may be an artifact of the wide-spread use of investment grade as an important portfolio governance threshold.¹⁹ Indeed, investment-grade and speculative-grade bond markets have developed along sharply distinct lines over the past two decades, leading to segmented investors, specialized intermediaries, and unique practices. Whatever the reason, we leave for others to investigate this anomaly.

Summary

We assert that the term *investment grade* did not originate with Moody's bond rating classifications. The distinction likely arose through private sector conventions and was later incorporated into regulations, first by banking and then by insurance officials. The choice of the **Baa/Ba** divide may have arisen from historical differences in default risk. On the other hand, the choice may have stemmed from expectations surrounding the diversification risks associated with lower-rated bonds. In any event, the relative difference in default rates between speculative- and investment-grade issuers has grown, and continues to persist, in part because of regulations and portfolio governance rules that now hinge on the distinction.

19. Adverse selection may cause a default gap to persist if regulatory and portfolio governance rules push speculative-grade spreads so wide that only the riskiest firms bother to seek such ratings.

Appendix

The Evolution of Moody's Bond Rating Definitions

	1909	1924	1935	1940	2003
Aaa	The bonds and stocks which are given this rating are regarded as of the highest class, both as regards security and general convertibility. Practically all such issues are dependent for their prices on the current rates for money, rather than the fluctuations in earning power. In other words, their position is such that their value is not affected, or likely to be affected (except in the cases of stocks not limited as to dividends), by any normal changes in the earning capacity of the railroad itself, either for better or worse.	Bonds carrying an Aaa rating meet the highest tests in asset value, earning power and stability and while there is considerable variation in these qualities between one issue and another, all such issues fall into the general classification as highest grade. Many such issues will have varying non-statistical characteristics, but such variations are usually superficial and unimportant and will seldom make an issue unavailable for this highest grade group if it measures up to the requirements of the "statistical rating."	Bonds carrying the Aaa rating represent the highest type of bond investment. Principal and interest are protected by wide margins in which little fluctuation is discernible. Naturally some variations exist within this classification but they are slight. Aaa bonds tend to move closely with rates for investment money.	Bonds rated Aaa are judged to be of the best quality. They carry the smallest degree of investment risk and are generally referred to as "gilt edge." Interest payments are protected by a large or by an exceptionally stable margin and principal is secure. While the various protective elements are likely to change, such changes as can be visualized are most unlikely to impair the fundamentally strong position of such issues.	Obligations rated Aaa are judged to be of the highest quality, with minimal credit risk.
Aa	This rating is given to those issues which, while high-grade, are, in a broad sense, slightly inferior to those having the first rating. Sometimes this inferiority may be in security and sometimes in salability. There is, however, but slight difference between these two classes of securities.	Bonds carrying an Aa rating fall one scale lower than those of very highest grade but in the test of asset value, earning power and stability, they always fall well into the high grade field and frequently the difference in their statistical rating from that of the highest grade is but slight. Sometimes certain non-statistical factors so qualify their position as to lower the final rating slightly. But all " Aa " bonds are well protected high grade investments.	Bonds carrying the Aa rating are one degree removed from the highest quality. In consistent protection of assets and income, they rank high, but they may lack some minor characteristic of the highest type of bond investment.	Bonds rated Aa are judged to be of high quality by all standards. Together with the Aaa group they comprise what are generally known as high grade bonds. They are rated lower than the best bonds because margins of protection may not be as large as in Aaa securities or fluctuation of protective elements may be of greater amplitude or there may be other elements present which make the long term risks appear somewhat larger than in Aaa securities.	Obligations rated Aa are judged to be of high quality and are subject to very low credit risk.
A	Bond and stock issues having this rating are affected, to a partial degree, by changing earning power, although they are generally of high grade. No security has been given this rating which is not regarded, as shown by the results of the decade, as being entirely secure, with a permanent and substantial future. In fact, the three ratings, Aaa , Aa , and A , can all be regarded as good, and the differences between them are not very great. In a general sense, they are in the class of securities which are affected more by general conditions and changing money rates, than by fluctuations in earning capacity.	Bonds carrying an A rating are also well up the scale as regards such tests as asset value, earning power and stability. While necessarily on a lower plane in these weighted averages, their classification as high grade investments is fully demonstrated. Frequently, a bond issue which is safely lodged in the A group at its creation, shortly rises to the higher scale of Aa . And there are numerous instances of older A issues which finally become Aa and Aaa bonds. If an industrial bond falls from the A position, it is often due to some non-statistical factor, such as poorer management, etc.	Bonds carrying the A rating are still within the sound investment classification. Coverage for principal and interest may be regarded as adequate but conditions affecting the borrower may be subject to some fluctuation.	Bonds rated A possess many favorable investment attributes and are to be considered as higher medium grade obligations. Factors giving security to principal and interest are considered adequate but elements may be present which suggest a susceptibility to impairment sometime in the future.	Obligations rated A are considered upper-medium grade and are subject to low credit risk.

	1909	1924	1935	1940	2003
Baa	<p>Bonds having this rating are generally good, but have a speculative tinge and often are affected to a degree by declines or increases in the earning capacity of the properties. In other words, they are to be regarded, from the investor's standpoint, as good, but second-grade issues.</p>	<p>Bonds carrying a Baa rating generally make a good showing in the tests of asset value, earning power and stability, but they warrant more discrimination than those of higher rating. Many unseasoned issues of strong companies are given this rating as well as the junior bonds of large corporations with several funded obligations. Occasionally a Baa bond represents an issue of a representative corporation where the outlook is uncertain and a once prime investment while still sound has acquired a speculative tinge. For investors who do not exclusively seek the very highest groups of bonds, Baa issues will frequently afford a larger income return than the Aaa, Aa or A classes. Bonds of this rating may in the course of time enter a higher class if the corporation maintains good earning power, conservative and efficient management and a sound financial position.</p>	<p>Bonds carrying the Baa rating comprise that large group of investments which are neither very good nor very bad. This is the classification in which speculative elements begin distinctly to appear. The extent and stability of income and security may be satisfactory but certainly not noteworthy.</p>	<p>Bonds rated Baa are considered as lower medium grade obligations, i.e. they are neither highly protected nor poorly secured. Interest payments and principal appear adequately protected for the present but certain protective elements may be lacking or may be characteristically unreliable over any great length of time. Such bonds lack outstanding investment characteristics and in fact have speculative characteristics as well.</p>	<p>Obligations rated Baa are subject to moderate credit risk. They are considered medium-grade and as such may possess certain speculative characteristics.</p>
Ba	<p>This rating is given to those issues which make a moderately favorable showing and are regarded as well secured, but are more affected by changing earning power. They stand in danger of declining in value with a falling-off in earnings, but, on the other hand, with great improvement in earnings, are apt materially to advance in strength.</p>	<p>Bonds carrying a Ba rating always have some characteristic of uncertainty, as is shown by the statistical tests of asset value, earning power and stability to which they are put by our organization. Ba bonds cannot be recommended for off-hand commitment. Sometimes they are fairly typical issues of small companies subject to the limitations of that group. In other cases they are clearly dominated by uncertainties such as violent fluctuations in earnings or excessive competition. Under certain conditions Ba bonds are attractive, but as a class they are in a position where they can readily become very much better or very much worse.</p>	<p>Bonds carrying the Ba rating generally have some elements of uncertainty. Investment characteristics are not entirely absent, but speculative elements begin to dominate. Such bonds are in a position where they can readily become better or worse.</p>	<p>Bonds rated Ba are judged to have speculative elements; their future cannot be considered as well assured. Often the protection of interest and principal payments may be very moderate and thereby not well safeguarded during both good and bad times over the future. Uncertainty of position characterizes bonds in this class.</p>	<p>Obligations rated Ba are judged to have speculative elements and are subject to substantial credit risk.</p>

	1909	1924	1935	1940	2003
B	Issues having this rating are more susceptible to fluctuations, and are to be regarded as more speculative in position than those just mentioned.	Bonds carrying a B rating are always characterized by speculative features and fall well down the scale in our statistical formula. Usually their asset value is somewhat uncertain, their earning power is weak or of a fluctuating character and their stability is comparatively poor. Very often a bond issue of the B class, in the course of time rises to a higher plane, but almost as frequently it turns out poorly and slips to a still lower grade. While there are exceptions, B bonds should not be sold to or bought by investors who think they are buying high grade investments. They are, however, quite frequently very attractive speculative purchases, and for people who wish to buy bonds for a speculative rise, a study of B bonds is always well worth while. But intelligent selection is absolutely essential.	Bonds carrying the B rating are essentially speculative. Security of principal or interest is uncertain; stability may be lacking. If any investment characteristic is present it is distinctly subordinate to uncertainties and speculative elements.	Bonds rated B generally lack characteristics of the desirable investment. Assurance of interest and principal payments or of maintenance of other terms of the contract over any long period of time may be small.	Obligations rated B are considered speculative and are subject to high credit risk.
Caa	Issues which are almost directly responsive to changes in earning power, and have not during the decade had the benefit of available income equal to more than double the interest requirements, are to be regarded in this speculative class.	Bonds carrying a Caa rating usually have a decidedly poor statistical standing and fall short of all tests such as asset value, earning power and stability. Frequently they are issues which are in grave danger of default or which may remain in a position of uncertainty for long periods. In the industrial field are many such issues, and while they often have speculative value they are not the type of bond to be recommended for any genuine investment purpose.	Bonds carrying the Caa rating have a decidedly poor statistical standing. Bonds in default or in an uncertain position for a long period frequently receive this rating.	Bonds rated Caa are of poor standing. Such issues may be in default or there may be present elements of danger with respect to principal or interest.	Obligations rated Caa are judged to be of poor standing and are subject to very high credit risk.

	1909	1924	1935	1940	2003
Ca	<p>These issues are less strong in position than those mentioned above, and approach more closely to the field of speculative issues with but moderate security.</p>	<p>Bonds carrying a Ca rating are still lower in standing than those defined above, and in all statistical tests show marked weakness of one kind or another. Not only are such issues often in danger of default, but frequently they do default and the holders suffer great losses in principal. In some cases bonds which are already in default and are awaiting reorganization are given this rating; and in such cases, if it is demonstrated that under reorganization the bond may fare well, it may prove to be an excellent speculative purchase. There have been some cases, of course, where Ca bonds have worked up to higher positions, as have those of the still lower classes, but such are the exception rather than the rule.</p>	<p>Bonds carrying the Ca rating are still lower in standing than those defined above, and in statistical tests show marked shortcomings.</p>	<p>Bonds rated Ca represent obligations which are speculative in a high degree. Such issues are often in default or have marked shortcomings.</p>	<p>Obligations rated Ca are highly speculative and are likely in, or very near, default, with some prospect of recovery of principal and interest.</p>
C	<p>Issues given this rating are those which usually show but a slight margin in surplus above the amount required for their interest, and which are not well secured, or perhaps have not any readily available markets.</p>	<p>Bonds carrying a C rating are not to be classed as investments at all, as they seldom possess much investment value. Usually they are defaulted issues, or issues about to default or be otherwise scaled down. As a general rule, they fall completely short of all real statistical tests, and their prospects for improvement are generally involved in doubt. In the majority of cases, such bonds are not even fair speculations; they may sometimes be good "gambles."</p>	<p>Bonds carrying the C rating are obviously in an extremely remote position and offer little prospect of improvement in quality.</p>	<p>Bonds rated C are the lowest rated class of bonds and issues so rated can be regarded as having extremely poor prospects of ever attaining any real investment standing.</p>	<p>Obligations rated C are the lowest rated class of bonds and are typically in default, with little prospect for recovery of principal or interest.</p>

	1909	1924	1935	1940	2003
Daa/ Da/D	All issues below C are of doubtful character and of almost purely speculative value. There are few such rated in this book, except in the case of stocks, and the differences between them are more those of degree than of character. It is not the purpose of the book to analyze to any pronounced extent the differences between purely speculative securities and, therefore, no attempt has been made to follow the ratings lower than this figure. The vital point has been so to classify and rate the high-grade issues and the good stocks as to give the investor or user of the book an approximate idea of the general position, in a relative sense, of the different investment and semi-investment issues.	Bonds given any of these low ratings are all in the purely speculative classes, and not to be dignified by the term "investment." In no cases do they meet any reasonable tests regarding asset value, earning power or stability and in all non-statistical tests they always stand very low. Those issues classified under Daa of course have some moderate elements of value, which are usually reflected fairly well in their market price; and cases have been known where a defaulted Da issue, selling at ten cents on the dollar, has proven "cheap" in the long run. But usually Da and D bonds in time reach zero.			
E	This rating has been given to a few defaulted issues, most of which are awaiting the results of reorganization.				

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