

This PDF is a selection from an out-of-print volume from the National Bureau of Economic Research

Volume Title: Yields on Corporate Debt Directly Placed

Volume Author/Editor: Avery B. Cohan

Volume Publisher: NBER

Volume ISBN: 0-87014-472-3

Volume URL: <http://www.nber.org/books/coha67-1>

Publication Date: 1967

Chapter Title: Yields on Direct Placements and Yields on Public Offerings

Chapter Author: Avery B. Cohan

Chapter URL: <http://www.nber.org/chapters/c1515>

Chapter pages in book: (p. 125 - 134)

6

YIELDS ON DIRECT PLACEMENTS AND YIELDS ON PUBLIC OFFERINGS

This chapter attempts to respond to the following question: are yields on direct placements higher than, lower than, or about the same as yields on comparable public offerings?

A priori, we would expect that yields *net-to-the-issuer*¹ would be about the same for comparable issues sold at the same time—regardless of whether they were direct placements or public offerings—provided only that the issues being compared had had clear access to both markets. Why, after all, should any company sell an issue to yield 4.2 per cent in the direct placement market when comparable issues are selling in the public market to yield 4.0 per cent?

The findings here suggest that two more or less separate markets exist with perhaps some overlap: The public market has a competitive advantage with respect to the issues of the larger, better-known companies and hence tends to specialize in such issues. Yields on such issues tend to be lower in the public market. On the other hand, the direct placement market has a competitive advantage with respect to the issues of smaller, lesser-known companies and hence tends to specialize in *such* issues. Yields on these issues tend to be lower in the direct placement market.

Yields Net-to-the-Issuer

The cost of flotation of public issues is not negligible. On September 7, 1951, for example, The National Container Corporation

¹ That is, after adjustment for cost of flotation.

TABLE 62

*Underwriting Costs by Quality Rating and Industrial Classification,
1951, 1956, and 1961*
(in basis points)

	Quality Rating				
	Aaa	Aa	A	Baa	Ba
1951					
Industrials	--	5.3	6.7	15.0	29.4
Public utilities	3.0	3.0	4.3	11.7	--
1956					
Industrials	5.5	5.3	7.2	8.6	15.5
Public utilities	3.0	4.3	5.8	11.0	--
1961					
Industrials	5.6	5.7	8.3	11.0	24.5
Public utilities	4.0	4.5	5.4	9.1	--

sold a 4½ per cent \$20 million issue, rated Baa, at a cost of flotation of 4 per cent of the offering price. This meant that National Container received 4 per cent less than \$20.0 million, or \$19.2 million. Interest charges of 4½ per cent on the face amount (plus, of course, repayment at maturity of the face amount) raised National Container's effective cost to 4.88 per cent, or by 38 basis points. This is an extreme case but, as Table 62 indicates, cost of flotation can make a difference in cost on issues of every size and especially on smaller issues of lesser quality. In any case, however, it seems obvious that the issuer, in choosing between a direct placement and a public offering, will compare effective yields rather than nominal yields.

In order to arrive at yields net-to-the-issuer, we should adjust not merely for the cost of flotation of public offerings but also for the cost of flotation of direct placements, and other differential costs. Unhappily, this is easier said than done. Data on the underwriting costs of public offerings are publicly available and, for the

TABLE 63

Underwriting Costs or Fees Paid to Agents, and Other Expenses, as Per Cent of Offering Price, by Size of Issue for Direct Placements and Public Offerings, Selected Years, 1947-50

Size of Issue ^a (million dollars)	Underwriting Costs or Fees		Other Expenses	
	Direct Placements	Public Offerings	Direct Placements	Public Offerings
0-499	1.70	7.34	1.14	2.88
500-999	1.39	5.51	.85	3.21
1,000-2,999	.86	3.52	.54	2.09
3,000-4,999	.61	1.41	.40	1.28
5,000-9,999	.59	.88	.32	1.03
10,000-24,999	.31	.99	.25	.73
25,000 and over	.22	.72	.17	.43

Source: Securities and Exchange Commission. For years, see text.

^aClass intervals not strictly uniform in all cases as between direct placements and public offerings.

period since January 1, 1951, have been put into convenient form by Halsey, Stuart and Company.² But data on fees paid to agents by issuers in connection with the sale of direct placements and data on the other expenses of both types of issues are not systematically available.³ The Securities and Exchange Commission has made estimates for three years for direct placements (1947, 1949, and 1950) and for five years for public offerings (1945-49).⁴

The pertinent figures are reproduced in Table 63. Two things are clear: first, the differential in favor of direct placements is large,

² See *Competitive Sales and Negotiated Public Offerings of New Public Utility, Railroad and Industrial Debt Issues*, Chicago (undated).

³ Other expenses include listing fees, federal revenue stamps, state taxes and fees, trustee fees, printing and engraving, legal fees, accounting fees, engineering fees.

⁴ Securities and Exchange Commission, *Privately-Placed Securities—Cost of Flotation* (corrected printing), Washington, D.C., September 1952.

especially on the smaller issues; for a company considering an issue of less than \$500 thousand dollars, the total cost (underwriting plus other expense) averaged 10.22 per cent of offering price for a public offering (7.34 plus 2.88) but only about 3 per cent for a direct placement.⁵ The difference (7 percentage points on a fifteen-year, 4 per cent issue) is equal to about 65 basis points. Although the difference on large issues is considerably less, it is not negligible; even when a fee was paid to an agent on a direct placement, the difference was about 7 basis points for issues of over \$10 million and about 5 basis points for issues of over \$25 million.

Second, Table 63 suggests that for every size of issue the *difference* in "other expenses," in favor of direct placements, was roughly the same as the fee paid to an agent in connection with a direct placement. Thus, in the smallest class the difference in "other expenses," 1.74 ($= 2.88 - 1.14$), is almost equal to the fees paid to agents. In the largest class the difference was .26 ($= .43 - .17$), about equal to the fees paid in that class. The relationship is rough and it is not uniform from class to class but it enables us to disregard fees paid on direct placements and other expenses on both types of issues; i.e., it enables us to put both types of issues on a comparable, net-cost-to-the-issuer basis simply by adjusting yields on public offerings for underwriting expense.⁶

The principal defect in the foregoing assumption is that fees were paid on only about half of the direct placements surveyed by the SEC. This means that effective yields on direct placements are being consistently overstated relative to yields on public offerings, perhaps by as much as 10 basis points on the smaller issues and by lesser amounts on the larger issues, e.g., by perhaps 1 or 2 basis points on issues of \$10 million and over.

⁵ When a fee was paid to an underwriter. Actually, no fee was paid on about half the direct placements and, when no fee was paid, the total cost of flotation is represented by the figure given under "other expenses."

⁶ We are disregarding two things: first, the fees paid on direct placements which would raise yields on direct placements relative to yields on public offerings, and second, the difference in other expense which would lower yields on direct placements relative to yields on public offerings. We are saying that these two effects will approximately cancel each other.

Procedure

In order to assess the level of yields on direct placements relative to that on public offerings, time held constant, five steps were taken.

1. Data were collected on all the industrial public offerings and on a 30 per cent random sample of utility public offerings with a face value of \$2 million or more, sold from January 1, 1951, through December 31, 1961.⁷ The data collected on each issue were: date of offering, yield before deduction of underwriting fees; yield after deduction of underwriting fees; total capitalization (X_2); total interest, five-year average (X_4); size of issue (X_6); type of security (X_5); industrial classification (X_6); EBIT, five-year average (X_{12}); maturity (X_{13}); and the ratio of pro-forma long-term debt to pro-forma total capitalization (X_{15}). The basic data were obtained from Moody's and adjusted as necessary. In the absence of data on years nonrefundable (X_7) and average term (X_3), estimates were made for these two variables.

2. Industrials were separated from utilities, and the observations deposited in the appropriate cells of the matrixes set forth in Charts 6 and 13.⁸

3. Yields net-to-the-issuer were then averaged over each diagonal and quarterly "series" obtained—seven for industrials and eight for utilities.

4. Residuals were obtained quarterly for each series by subtracting yields on public offerings from yields on direct placements. Thus, a positive residual meant a higher yield for the given class and quarter on direct placements and a negative residual, a lower yield.⁹ The residuals were then averaged algebraically within each class, over the whole period.

The results of the averaging are given, separately for industrials and utilities, in the first and third columns of Table 64. The residual

⁷ About 200 issues of each type, pure debt issues only.

⁸ The matrixes were adjusted to give full effect to the fact that some public offerings are sold by very large companies.

⁹ Comparisons were possible in less than half the quarters for nearly all series.

Yields on Corporate Debt Directly Placed

TABLE 64

*Actual and Computed Yields on Direct Placements
Minus Yields on Public Offerings, by Quality
Class, Eleven-Year Average, 1951-61*

Class	Average Residuals			
	Industrials		Utilities	
	Actual	Computed	Actual	Computed
1	+ .45	+ .33	--	+ .16
2	+ .37	+ .15	+ .63	+ .20
3	+ .30	+ .15	+ .44	+ .12
4	+ .08	- .03	+ .29	+ .19
5	- .21	- .06	--	+ .05
6	--	--	--	+ .08

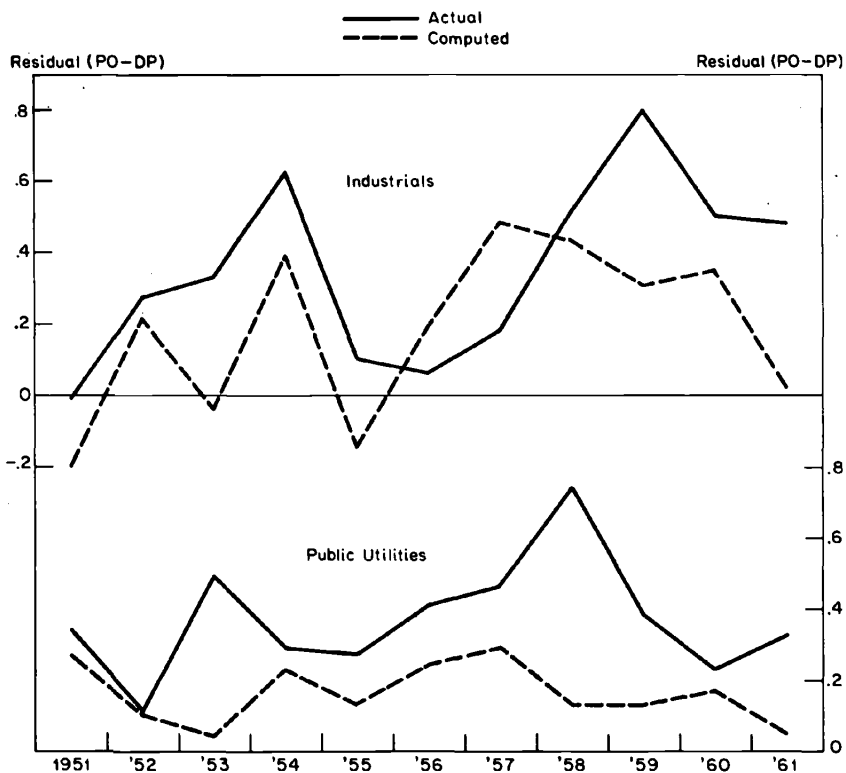
TABLE 65

*Actual and Computed Yields on Direct Placements Minus
Yields on Public Offerings, Classes 2, 3, and 4 Only,
Annually, 1951-61*

Year	Industrials		Utilities	
	Actual	Computed	Actual	Computed
1951	- .01	- .20	+ .34	+ .27
1952	+ .28	+ .22	+ .11	+ .10
1953	+ .33	- .04	+ .49	+ .04
1954	+ .62	+ .39	+ .29	+ .23
1955	+ .10	- .15	+ .27	+ .13
1956	+ .06	+ .19	+ .41	+ .24
1957	+ .18	+ .48	+ .46	+ .29
1958	+ .51	+ .43	+ .74	+ .13
1959	+ .80	+ .31	+ .38	+ .13
1960	+ .50	+ .35	+ .23	+ .17
1961	+ .48	+ .02	+ .33	+ .05

CHART 20

Industrials and Utilities: Yields on Direct Placements Minus Yields on Public Offerings, Actual and Computed, Classes 2, 3, and 4 Only, Annually, 1951-61



SOURCE: Table 65.

declines steadily from class to class, and for industrials becomes negative in class 5. (Comparisons were possible for utilities for only three classes.)

5. The quarterly observations were averaged annually, for classes 2, 3, and 4 combined (Table 65). These annual averages are plotted in Chart 20.¹⁰

¹⁰ Neither quarterly series for the three classes combined nor annual series for each class separately could be constructed.

The results raised two questions: (1) Why is the residual positive? (2) Why, for industrials and apparently not for utilities, does the residual decline from class to class?

Computed Residuals

Residuals were, of course, compared class by class. But some possibility remained that the public offerings in any given class were, on the average, "better" than the direct placements in the same class. If they were, this fact might account for all or part of the residual in favor of public offerings. In order to be sure that everything was being held constant, residuals were computed.

1. A hundred industrial public offerings and a hundred and twenty utility public offerings were chosen at random from the samples described above.

2. A yield was computed for each by "plugging" the data collected from Moody's on each X into the original quarterly *direct placement* regression equations. This procedure responded to the following question: If this particular public offering had been sold, when it was sold, not as a public offering but rather as a direct placement, *what would the yield on it have been?* The issue was, thus, being compared with itself.¹¹

3. Residuals were then obtained for each issue by subtracting the actual yield on the issue (as a public offering) from the computed yield. Again, a positive residual meant that the "theoretical" yield on the issue as a direct placement was higher than the actual yield on the issue when it was sold as a public offering.

4. These computed residuals were deposited in the appropriate class and an average was taken within each class over the whole period. These averages are given by class, separately for industrials and utilities, in the second and fourth columns of Table 64.

The results are interesting. First, holding every thing constant has lowered the level of the residual in every class both for indus-

¹¹ Except to the extent that X_3 and X_7 had been inaccurately estimated.

trials and utilities. Both sets of residuals continue to decline, though not as systematically as before, but the conclusion does appear warranted that the larger better-quality issues do better on the public market, whereas smaller lesser-quality issues appear to do better in the direct placement market. In other words, the public market is willing to pay a premium for the issues of well-known companies and, conversely, tends to exact a penalty, in the form of higher selling costs, on the issues of less well-known or little-known companies. Well-known companies are on the average larger and of better "quality" than little-known companies.

5. Classes 2, 3, and 4 were then combined and annual averages calculated (Chart 20). The cycle in the residual on industrials has virtually disappeared and the upward trend is reduced. The residual on utilities is now fluctuating very slightly around a horizontal line.

The following conclusions are inescapable: (1) The residual "existed" during the period 1951-61 both for industrials and utilities on the issues in fact compared. (2) The residual on both industrials and utilities declines from class to class.

A Suggested Hypothesis

A hypothesis which would explain the above findings follows.

There were, in fact, in the period 1951-61, *two* weighting systems—one for public offerings and one for direct placements. The weighting system for public offerings favored the issues of large well-known companies, whereas the weighting system for direct placements favored the issues of smaller lesser-known companies.

When the characteristics of the issues of large well-known companies are "plugged" into regression equations derived from direct placements, size and reputation of issuer receive less weight than they in fact did receive in the public market. Hence the yield on such an issue tends to be higher as a direct placement than its actual yield as a public offering. But this effect tends to be less in the lower classes simply because, as we go from class to class, size of issuer declines and the issuer itself tends to be less well-known.

This hypothesis would explain the tendency of the residual to decline from class to class. And the residual shows itself to be positive on the whole, over time, simply because the figures in Table 65 were derived from the higher classes, i.e., the classes in which public offerings predominate.¹²

In brief, the foregoing analysis suggests that the direct placement and public markets tend to serve different classes of customers. The direct placement market tends to serve small and medium-sized lesser-known issuers and the public market, the larger better-known issuers.¹³

Last, some large well-known companies directly placed their issues during the period. The foregoing analysis suggests that such issuers could have done better, *in terms of price*, in the public market. Therefore, the residuals given in Table 64, especially for classes 1 through 3, are estimates of the value put by such issuers on the *nonprice* advantages of direct placements.

¹² The foregoing hypothesis implies, of course, that if the characteristics of direct placements were "plugged" into a series of regression equations derived from public offerings, the residuals so obtained would favor direct placements during the period in question. Unfortunately, this test was beyond the resources of the present study.

¹³ Perhaps the extent to which the markets in fact compete depends on the level of interest rates. When money is tight the direct placement market may compete little if at all for the relatively low-yielding issues of the large well-known companies, and vice versa when money is easy.