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IV PROFITS AND THE USE OF PREFERENCE STOCKS

In discussions of corporate finance the effect, upon the earning power of the common stock interest, of the use of preference stocks in the scheme of capitalization, and the conditons under which preferred stocks are or should be employed, is often questioned, and deserves some attention here.

DESCRIPTION OF TABLE III

Table III presents profit ratios by groups of companies and compares for each group the rates earned by companies having only common stock with those having both common and preferred issues outstanding. The rates are aggregate ratios for the three-year period covered, the figures for all companies in each group being combined in determining the rate for the group. The rates for 'all companies' correspond with the aggregate ratios of Table II. They are determined in each case by combining the figures for 'net balance available for dividends' as shown by the reports, for every date reported and for all companies in the group, to form the numerator of the fraction, and adding the figures for total stock equity as shown by the reports (see explanation in description of Table II), for each date reported and for all companies in the group, to form the denominator. The rates for 'companies with common stock only' are similarly determined. In computing the rates for 'companies

TABLE III

RATE OF EARNINGS AS RELATED TO FORM OF CAPITALIZATION

(ratios of three-year aggregates)

	All Companies		Without Preferred Stock		With Both Preferred and Common Stock			
CODE NO.[1]	NO. OF COS.	RATIO OF NET PROFIT TO TOTAL STOCK EQUITY	NO. OF COS.	RATIO OF NET PROFIT TO TOTAL STOCK EQUITY	NO. OF COS.	PERCENTAGE OF TOTAL COMPANIES	RATIO OF NET PROFIT TO TOTAL STOCK EQUITY	RATIO OF EARNINGS AFTER ALLOWANCE FOR DIVIDENDS ON PREFERRED STOCK TO COMMON STOCK EQUITY
C	341	9.57	186	10.16	155	45	9.33	10.25
C- 1	6	9.77	4	12.68	2	33	6.62	19.09
C- 2	13	11.33	7	18.74	6	46	8.90	12.14
C- 3	6	5.70	3	13.02	3	50	4.82	4.27
C- 4	6	6.98	4	8.95	2	33	3.72	3.54
C- 5	23	12.11	18	15.43	5	22	11.11	13.26
C- 6	17	5.70	4	10.22	13	76	4.68	3.93
C- 7	14	6.04	8	6.35	6	43	5.84	6.07
C- 8	8	7.55	4	8.51	4	50	7.45	7.16
C- 9	18	12.37	7	11.07	11	61	12.52	15.26
C-10	8	7.78	7	9.03	1	12	4.83	4.28
C-11	14	14.07	3	4.55	11	79	15.17	19.04
C-12	12	.19	7	.28	5	42	(d) .04[2]	(d)3.19
C-13	8	8.09	6	8.95	2	25	7.17	7.14
C-14	14	.82	9	9.00	5	36	(d)1.78	(d)8.89
C-15	10	7.26	7	5.25	3	30	7.96	8.12
C-16	7	9.63	5	13.06	2	29	3.92	2.63
C-17	11	7.51	2	14.12	9	82	6.29	6.71

C–18	20	11.41	12	10.54	8	40	11.77	14.39
C–19	17	12.50	9	8.81	8	47	13.18	16.08
C–20	22	8.79	13	9.25	9	41	8.69	8.95
C–21	8	12.23	2	9.85	6	75	12.35	13.43
C–22	10	9.13	4	15.30	6	60	4.08	.04
C–23	9	11.16	5	7.54	4	44	12.25	15.73
C–24	16	15.72	8	11.64	8	50	16.48	20.71
C–25	12	20.26	5	20.65	7	58	19.81	22.36
C–26	17	8.94	13	8.88	4	24	8.98	8.57
C–27	15	14.06	10	16.84	5	33	7.10	9.36
D	220	7.95 [3]	141	2.00 [4]	79	36	9.80	11.11
D– 1	11	12.61	11	12.61				
D– 2	9	7.11	6	3.09	3	33	10.43	12.44
D– 3	7	(d).11	4	3.68	3	43	(d) .97	(d)54.21
D– 4	20	10.53	7	5.59	13	65	10.88	14.52
D– 5	10	8.68	4	12.48	6	60	8.61	9.15
D– 6	15	10.22	10	5.43	5	33	10.76	11.97
D– 7	17	2.76	17	2.76				
D– 8	12	(d)26.00	8	(d)30.67	4	33	5.54	4.34
D– 9	21	23.31	16	21.00	5	24	26.29	43.32
D–10	11	7.26	8	8.11	3	27	6.76	6.34
D–11	15	6.63	8	5.44	7	47	7.13	7.21
D–12	7	8.16	4	8.40	3	43	8.08	8.33
D–13	8	6.80	7	7.06	1	12	(d)1.82	(d)33.06
D–14	15	15.01	10	15.17	5	33	14.97	15.23
D–15	42	10.51	21	13.82	21	50	9.86	11.04
A– 1	8	6.57	6	8.94	2	25	(d)2.07	(d)4.28
A– 2	10	9.05	9	[illegible].17	1	10	2.07	3.44

TABLE III (*cont.*)

RATE OF EARNINGS AS RELATED TO FORM OF CAPITALIZATION

(*ratios of three-year aggregates*)

CODE NO.[1]	All Companies: NO. OF COS.	All Companies: RATIO OF NET PROFIT TO TOTAL STOCK EQUITY	Without Preferred Stock: NO. OF COS.	Without Preferred Stock: RATIO OF NET PROFIT TO TOTAL STOCK EQUITY	With Both Preferred and Common Stock: NO. OF COS.	With Both Preferred and Common Stock: PERCENTAGE OF TOTAL COMPANIES	With Both Preferred and Common Stock: RATIO OF NET PROFIT TO TOTAL STOCK EQUITY	With Both Preferred and Common Stock: RATIO OF EARNINGS AFTER ALLOWANCE FOR DIVIDENDS ON PREFERRED STOCK TO COMMON STOCK EQUITY
A– 3	15	.81	10	3.60	5	33	(d) .47	(d)2.40
A– 4	4	(d)4.85	3	(d)4.81	1	25	(d)5.87	(d)8.73
B– 1	9	14.74	8	15.75	1	11	11.00	11.04
B– 2	12	18.50	12	18.50				
E– 1–2	21	9.99	18	9.80	3	14	13.12	15.39
F– 1	6	41.05	6	41.05				
F– 2	10	5.56	9	5.56	1	10	23.71	25.59
F– 3	21	23.61	16	24.01	5	24	6.87	6.97
F– 4	15	15.38	12	18.71	3	20	4.67	3.91
All other, total	131	12.14	109	14.79	22	17	.49	(d)1.46
All cos.	692	9.64[5]	436	10.71[6]	256	37	9.00	9.84

[1] For code numbers and their references, see 'Classification of companies' in Ch. I.

[2] Negative values are indicated by (d).

[3] If dealers in fruit, vegetables, etc. are eliminated, this ratio becomes 9.36.

[4] If dealers in fruit, vegetables, etc. are eliminated, this ratio becomes 7.59.

[5] If dealers in fruit, vegetables, etc., and the group of printers, publishers, etc., are eliminated, this becomes 9.17.

[6] If dealers in fruit, vegetables, etc., and the group of printers, publishers, etc., are eliminated, this becomes 9.49.

having both preferred and common stock' it was necessary to adjust the 'net balance available for dividends' by the amount of preferred dividends to determine the profit balance available for common stock. The amount of preferred dividends accruing at the stated dividend rate (a rate of 7 per cent being used whenever the data sheets did not specify the rate) was deducted in each case, whether paid or not. The 'common stock equity' is assumed to include all surplus accounts, earned or special. That is, the equity of the preferred stock is restricted to the preferred stock account as shown in the report.

USE OF PREFERRED STOCKS—ALL COMPANIES

An examination of Table III shows an aggregate net profit rate on total stock equity for all companies included of 9.64 per cent, a rate for all companies having only common stock of 10.71 per cent, and a rate for all companies with both preferred and common issues of 9.00 per cent. The aggregate profit rate earned on common stock by all companies having preferred issues is 9.84 per cent. This is somewhat higher than the rate earned on the total stock equity for the same companies, but lower than the rate earned by those companies having common stock only, suggesting that it is not safe to assume that there is a tendency for preferred stocks to be used especially in enterprises showing a high earning power.

Attention is called to the fact that two groups of companies exert a marked influence on the final results for all companies. Dealers in fruit, vegetables, etc. as a group show exceptional losses for the period covered, while printers, publishers, etc. show unusual earning power; and in each of these groups there are several relatively large concerns. The advertising group (six companies) also shows exceptional earning power but the concerns involved are relatively small and hence this group does not exert much influence on the aggregate figures for all companies.

That the average size of companies making use of preferred stock is large as compared with concerns with common only, and that the percentage of the capital structure represented by preferred stock is in general small as compared with that represented by common stock and surplus, is shown by the tabulation. These figures also indicate that

NUMBER OF COMPANIES	FORM OF CAPITALIZATION	AVERAGE SIZE IN NET ASSETS IN 1929	REPRESENTED BY PREFERRED STOCK (*percentage*)	REPRESENTED BY COMMON AND SURPLUS (*percentage*)
256	With preferred	$4,002,376	19.65	52.04
436	Without preferred	1,211,342		70.33

the presence or absence of preferred stock has no bearing upon the amount of fixed and current liabilities, as the proprietary ratio (total stock equity to net assets) stands at approximately 70 per cent for both classes of companies. For each, in other words, current and fixed liabilities represent about 30 per cent of net assets.

Of the 256 companies with preferred stock 134 companies show an earning rate higher than the preferred dividend rate while 122 companies earned less than the required preferred rate. Thus, as far as number of companies goes, there is very slight indication of an ability to increase rate of profit to common stock through the issue of preferred. The preferred dividend record, showing payments and earning rates in relation to dividend rates, is summarized herewith.

GROUP	NUMBER WITH PREFERRED STOCK	PREFERRED DIVIDEND RECORD: PAID IN FULL	PAID IN PART	NO PAYMENTS	NUMBER IN WHICH EARNING RATE WAS: HIGHER THAN DIVIDEND RATE	LOWER THAN DIVIDEND RATE
Manufacturing	155	117	14	24	81	74
Trading	79	55	8	16	44	35
All other	22	14	0	8	9	13
All companies	256	186	22	48	134	122

PREFERRED STOCKS IN THE MANUFACTURING FIELD

Among the 341 companies in the manufacturing division the 155 companies having preferred stock show a profit rate to total stock equity appreciably less than that indicated for companies with only common stock outstanding. However, the rate of return to common stock, after allowing for preferred dividends declared and accrued, is just a trifle higher for the companies having preferred stock than the corresponding rate for companies with common stock only. This indicates that for these three years the use of preferred stock was a profitable device from the standpoint of the common stockholders over the manufacturing field as a whole. By actual count, 81 of the 155 manufacturing companies with preferred stock showed a higher rate of return to common stockholders as a result of having preferred stock outstanding. The advantage becomes more pronounced in the aggregate figures, because these 81 companies were larger on the whole than the remaining 74. The tabulation shows that for these 155 companies the rate of return to the total common stock equity was 10.25 per cent compared with a rate of 9.33 per cent on the total stock equity.

A group of manufacturing companies showing outstanding success in the issue of preferred stocks is found in clothing and dry goods. All of the eleven companies in this group which made use of preferred stock paid regular dividends on preferred through the period under consideration. In eight of the eleven companies the rate of profit on the total stock equity was more than double the dividend rate on the preferred stock, and the rate of return on the common stock in these companies averaged more than 20 per cent. The soundness of the preferred stocks in this group is evidenced by the fact that the preferred dividend rate in one case is 5 per cent, in five cases 6 per cent, in four, 7 per cent, and in one case 8 per cent.

PREFERRED STOCKS IN THE TRADING FIELD

In the trading field the aggregate profit rate for all 220 companies included is 7.95 per cent, or 9.36 per cent if the unusual group of dealers in fruit, vegetables, etc. is eliminated. For the companies having only common stock the aggregate rate is 7.59 per cent if the unusual subgroup mentioned is excluded, only 2.00 per cent if this group is retained. The losing companies among dealers in fruit, vegetables, etc. are, evidently, concerns with common stock only. The companies in the trading field making use of preferred stocks, on the other hand, show a rate on total stock equity of 9.80 per cent and an aggregate rate on common stock of 11.11 per cent. This condition is evidently somewhat in contrast to that obtaining in the manufacturing group and is a further indication of the relatively low earning power of the smaller companies in the trading field. The 133 concerns in the trading field having no preferred stock (and exclusive of dealers in fruit, vegetables, etc.) represent three-fifths of the number of trading companies, but their total stock equity is only one-fifth of the total for all trading companies, which indicates the small size of these companies on the average.

It is of interest to note that 45 per cent of the number of companies in the manufacturing field use preferred stock, while in the trading field the percentage is only 36.

PREFERRED STOCKS IN OTHER GROUPS

Among the 'all other' companies it appears that those concerns having preferred stock (only 22 out of 131) have in general a much lower earning power than those with common stock only. In considerable measure this is due to the fact that included in printing, publishing, etc. are several concerns with common stock only and with very high earning power, and that several logging and coal mining companies having preferred stocks show very severe losses. It must be remembered that the data in the 'all other' group are too meager and too heterogeneous to warrant the making of generalizations from the percentages shown.

ANALYSIS OF PREFERRED STOCK ISSUES

In an effort to throw some further light on the conditions giving rise to the use of preferred stocks and the financial standing of the various issues involved, a segregation was made of all companies in which preferred stock constituted 20 per cent or more of the net assets, using a three-year average for both factors in the segregation, and comparisons were made between this group and all other companies having preferred issues. The findings are summarized below. The comparisons indicate, as would be expected, a more secure position for those preferred issues which represent a relatively small portion of the total resources.

COMPANIES FINANCING 20 PER CENT OR MORE OF NET ASSETS WITH PREFERRED STOCK

GROUP	NUMBER OF COMPANIES	DIVIDENDS FULLY PAID NUMBER	DIVIDENDS FULLY PAID PER CENT
Manufacturing	81	56	69.1
Trading	37	23	62.2
All other	9	3	33.3
Total	127	82	64.6

COMPANIES FINANCING LESS THAN 20 PER CENT OF NET ASSETS WITH PREFERRED STOCK

GROUP	NUMBER OF COMPANIES	DIVIDENDS FULLY PAID NUMBER	DIVIDENDS FULLY PAID PER CENT
Manufacturing	74	61	83.6
Trading	42	32	76.2
All other	13	11	84.6
Total	129	104	80.6

In the group having relatively large preferred issues (that is, those which finance 20 per cent or more of net assets with preferred stock) a further division was made by size in terms of average net assets for the three-year period. The dividing line selected was $1,000,000 of net assets. Preferred dividend return rates were also computed for the companies in this group. These rates were calculated by dividing the aggregate preferred dividend payments for the three years concerned by the total book values of the preferred issues for the same period. For instance, in the manufacturing group of companies with over $1,000,000 assets, a total of $5,531,562 was paid to preferred stockholders in the three years; the total preferred stock, adding each year separately, amounted to $94,787,542 at book value; the dividend total divided by the preferred capital total gives a dividend yield rate of 5.84 per cent. In these calculations appropriate adjustments were made for any changes in preferred capitalization occurring from year to year. The schedule below summarizes the results. It shows clearly that of the companies raising a considerable portion of their total capital through the issue of preferred stock in general the larger concerns have the sounder preferred issues. This condition is especially marked among the trading companies.

COMPANIES FINANCING 20 PER CENT OR MORE OF NET ASSETS WITH PREFERRED STOCKS

SIZE IN NET ASSETS	NUMBER OF COMPANIES	DIVIDENDS FULLY PAID NUMBER	DIVIDENDS FULLY PAID PER CENT	RATE OF RETURN (*per cent*)
Under $1,000,000				
Manufacturing	30	19	63.3	5.02
Trading	18	8	44.4	3.98
All other	5	2	40.4	3.98
Total	53	29	54.7	4.63
$1,000,000 and over				
Manufacturing	51	37	72.5	5.84
Trading	19	15	78.9	6.01
All other	4	1	25.0	1.11
Total	74	53	71.6	5.63

In a recent study by R. G. Rodkey [6] it is shown that for the large listed corporations preferred stocks preceded by bond indebtedness have proved to be much less sound over a long period than preferred issues of companies having no bonds. This test has not been applied to the companies under consideration here, especially since for many of them the amount of fixed liabilities is small or nil, and also because the amount of the 'long-term liabilities' is shown as a single figure in the data sheets.

[6] *Preferred Stocks as Long-Term Investments* (Michigan Business Studies, Vol. IV, No. 3).