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A COMMENT ON MARKET STRUCTURE AND STABILIZATION POLICY

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Recently, in this REVIEW,¹ Professor Galbraith has asserted that in the case of monetary policy the "inflation can be controlled by denying credit to what are, in a general way, the least powerful firms" (page 132). Elsewhere, these least powerful firms are identified as the smaller firms (pages 131, 132, 133), and evidence concerning the distribution of bank loans by size is presented, to indicate that "while the case cannot be proven, there is a

strong probability that in the last couple of years the effect of monetary policy has been to ration credit from all sources away from smaller firms in the competitive sector and to larger firms in the oligopolistic sector" (page 133).

As Professor Galbraith elsewhere recognizes, the effects of monetary policy on the firm should appear as a change in investment by the firm (pages 130-31). If the proposition that large firms gain relatively to small firms during a period of rising interest rates is to be confirmed, it is to the relative changes in investment that we should look for an answer.

Fortunately, some of these data are available in

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¹ J. K. Galbraith, "Market Structure and Stabilization Policy," this REVIEW, XXXIX (May 1957), 124-33.

the form of investment plans and completed investment for both small and large firms.² While the results which follow do not present a complete study of the behavior of investment during the period 1950-55, they do cast doubt on the conclusion that the large firms were able to invest at a faster rate, hence grow at a faster rate, as a consequence of the policy pursued by the Federal Reserve. Specifically, these results contradict the Galbraith hypothesis.

Whether we use the rate of interest as measured by the rate on Aaa Corporate bonds (Moody's) or the rate on prime commercial paper, 1951 and 1955 appear as the years of major interest rate increases. While "tight money" and rising rates of interest are not the same thing, it is to be expected that stricter availability conditions would precede and/or accompany higher interest rates, and it is clear that the conditions which Professor Galbraith has described did take place during a period of rising interest rates. For the purposes of this note, it is not necessary to discuss the problem of availability conditions. Professor Galbraith agrees that 1955 is the beginning of a period of what has been called "tight money" (page 132).

To compare changes in investment by "small" and "large" firms during this period, three ratios were computed for each group. Columns 1 and 4 of Table 1 show the ratio of the change in planned investment to the planned investment for the current year ($\Delta P/P$). Columns 2 and 5 present a similar ratio for completed investment ($\Delta A/A$). A positive sign in any of these columns represents an increase, and a negative sign a decrease, in planned or actual investment. Columns 3 and 6 show the completion ratio (P/A). If actual investment exceeds planned investment, the ratio is less than one; if planned investment exceeds actual investment, the ratio is greater than one. By comparing the three ratios for "small" and "large" firms during the years 1951 and 1955, some indication of the differential impact of rising interest rates on the investment and growth rates of firms can be obtained.

For purposes of classification, firms are ranked according to size based upon the item Plant and Equipment obtained from Moody's. The "large" firms include all those in the sample with plant and equipment valued at one hundred million dollars or more in each of the years 1950 through 1955. The "small" firms are those with plant and equipment

valued at less than ten million dollars in each of these years. The smallest firm in any year has plant and equipment worth \$300,000. All figures for size are based upon book value of plant and equipment gross of depreciation, less land. Table 1 presents this information.

TABLE 1.—CHANGES IN INVESTMENT BY SMALL AND LARGE FIRMS, 1950-55

	Large Firms			Small Firms		
	$\Delta P/P$ (1)	$\Delta A/A$ (2)	P/A (3)	$\Delta P/P$ (4)	$\Delta A/A$ (5)	P/A (6)
1950			.998			1.115
1951	+.32	+.38	.901	+.51	+.59	.920
1952	+.42	+.35	1.010	-.05	-.20	1.044
1953	-.08	-.20	1.119	-.08	-.21	1.172
1954	-.51	-.43	1.061	-.84	-.56	.994
1955	+.18	+.14	1.104	+.20	+.22	.979

In both 1951 and 1955, years of rising rate of interest, $\Delta P/P$ and $\Delta A/A$ were positive for both large and small firms, indicating that there was an increase in both planned and actual investment for each group taken as a whole. In 1951, the percentage increase in both planned and actual investment was greater for the small firms than for the large firms, and the percentage increase in actual investment was greater than the percentage increase in planned investment for both groups. In 1955, the small firms increased their planned investment by approximately the same percentage as the large firms, but they were able to increase their actual investment by a greater percentage, greater than the percentage increase of their own plans and greater than the percentage increase in actual investment by the large firms. If these data point to any conclusion, it is that the increase in the rate of interest did not discriminate against the smaller firms.

The same result is shown by the ratio P/A . A decrease in this ratio shows that actual investment increased less than planned investment. For the year 1955, P/A increases for the large firms, decreases for the small firms.

This sample is composed of all firms in the Brown-Roseman study which reported both planned and actual investment in a given year. As such, it is subject to changes in composition and population from year to year, both because of failures to report and because of movements of firms from the small into the intermediate group and from the intermediate group into the large group. Table 2 is designed to correct this bias. Results in Table 2 are based upon a sample of 18 "small" and 18 "large" firms which are included in the categories "small" and "large" in the year 1955 and for which informa-

²Data from the SEC-OBE survey of investment were made available by M. Brown and H. Roseman. Cf. M. Brown and H. Roseman, "A Cross-Section Analysis of Manufacturing Investment During 1951-1955," presented at the Annual Meeting of the American Statistical Association, Atlantic City, 1957. Investment is measured by purchases of plant and equipment.

TABLE 2.—CHANGES IN INVESTMENT BY SMALL AND LARGE FIRMS, ADJUSTED SAMPLE, 1950-55

	Large Firms			Small Firms		
	$\Delta P/P$ (1)	$\Delta A/A$ (2)	P/A (3)	$\Delta P/P$ (4)	$\Delta A/A$ (5)	P/A (6)
1950			1.008			.686
1951	+ .30	+ .32	.986	+ .34	+ .24	.785
1952	+ .13	+ .04	1.082	+ .04	— .09	.898
1953	— .17	— .24	1.146	— .40	— .06	.685
1954	— .12	+ .02	1.007	+ .36	+ .04	1.032
1955	+ .08	— .03	1.128	+ .26	+ .28	1.004

tion is available for each of the six years. Firms in the intermediate group in earlier years were permitted to grow into the "large" group. Included in this group might be some of the fastest growing firms as well as those firms which had almost \$100 million in plant and equipment at the starting point (1950). However, firms which grew out of the "small" category between 1950 and 1955 were not retained in the sample.

TABLE 3.—INDUSTRY BREAKDOWN OF SAMPLE FIRMS IN TABLE 2.

Industry Number	Number of Large Firms	Number of Small Firms
01	1	2
02	5	1
03	3	2
04	0	5
05	0	2
06	0	2
07	1	1
08	0	2
09	1	1
10	4	0
11	1	0
12	1	0
13	1	0

These results differ slightly from those in Table 1. In 1951, the small firms increased their plans by a greater percentage than did the large firms, but increased their actual investment by a smaller percentage, smaller than their own percentage increase in plans and smaller than the percentage increase in the actual investment of the large firms. In 1955, the small firms increased their actual investment slightly more than they increased their plans and considerably more than the large firms increased

either actual investment or planned investment. In that year, the percentage increase in actual investment is positive for the small firms and slightly negative for the large firms. Again, the implication is that the increasing rate of interest in this year did not reduce the investment plans or completions of the small firms more than the plans and completions of the large firms.

Table 3 presents the industry breakdown of the firms in the sample shown in Table 2. Thirteen industries are represented in the data and, of these, five industries with eleven large firms and seven small firms are in an industry group which is common to both large and small firms. While some of the differences between firms may be attributed to industry differences, the indication that these firms overlap in industry groupings might deny that all differences can be thus explained.

The evidence presented in this note, like the evidence presented in the article by Professor Galbraith, does not permit any definitive or final qualitative judgment to be drawn. While it is doubtless true, as Galbraith points out, that bankers will lend more willingly to good risks than to bad, there is no necessary association between size of firm, market structure, and credit-worthiness. There is some evidence that credit rationing may take the form of a preference for established firms as opposed to new firms (large and small).³ More important, rapidly growing firms, whether large or small, are likely to be considered more credit-worthy by banks or financial institutions than stagnant firms.

The data presented deny the proposition that the growth of smaller firms was restricted in years of rising interest rates. For 1955, the rate of increase in actual investment by small firms in this sample is greater than the rate of increase in planned investment by small firms, and the latter rate is greater than the rate of increase in planned investment by large firms. It is difficult to conclude from this that credit policy in 1951 and 1955 discriminated against smaller firms, favored larger firms; it is something less than reasonable, on the basis of available evidence, to associate size and credit worthiness, market structure and rate of growth.

* L. F. McHugh and J. N. Ciacchio, "External Financing of Small-and-Medium-Size Business," *Survey of Current Business*, October 1955, 15-22.

REPLY

John Kenneth Galbraith

These figures are interesting, but I am a little puzzled as to why it is believed that they refute or

even make any very close contact with my argument. There is the obvious problem of timing. The

figures end with 1955, the year money rates were tightened again after the 1953-54 recession. My reference to the effect of monetary policy began with that year.

But there is a more serious difficulty. I did suggest that there was a pragmatic association between competitive market structure and size of firm, and on the strength of this adverted to the effect of the policy on small firms. But my article was centrally concerned with the differential impact of monetary policy on industries of different market structure. This is made clear by the title and, indeed, in the summary quotation which Mr. Meltzer gives in his first paragraph. And I assume, given the nature of the sources and sample, that among his small firms are few or no farmers, residential builders, automobile dealers, independent bituminous operators, or independent mercantile or service establishments. These are characteristic of the industries where the individual firms have little or no influence on their prices or margins. They are also the industries whence came the complaints about the tight money policy. And just as firms from such industries are not represented in any important number, so it can be assumed that many of his small firms (the smallest have assets of \$300,000) are from industries with oligopolistic market structures.

Thus the author quite bypasses the core of my argument.

Anyone who ventures any sort of hypothesis or model should welcome empirical test, and I do not wish to seem lacking in gratitude. I confess that I would be happier if, in the present instance, these tests were not so uniformly designed to prove the even-handed and non-discriminatory character of monetary policy. In this situation I have been considerably encouraged in receiving at least the tacit support of Chairman Martin of the Federal Reserve Board. Testifying before the House Select Committee on Small Business on November 21, 1957, he observed that "The economy has been undergoing a 'capital goods boom' and capital goods industries as well as industries requiring heavy capital investment are generally characterized by large-scale enterprises." To say that these industries composed of larger firms were able to have an investment "boom" during the period of tight money is, of course, to say that the tight money policy did not interfere with their investment. It follows that there was discrimination in favor of the industries of large-scale enterprises and *pro tanto* against the industries characterized by smaller firms. I trust that this distinguished support will be persuasive, and it is certainly most welcome.