[Dollars in millions]

	April-Ju	une 1953	April–June 1958			
	Sales	Percent of total sales <sup>2</sup>	Sales	Percent of total sales		
A. Type of fund:						
Balanced funds, mixed Common stock funds	\$1.5 1.8	6. 6 4. 1	\$5. 0 28. 7	6.6 13.3		
Income	1.0	8.2	3.0	6.0		
Growth Mixed	.8	3. 7	17.6 8.0	16.2 $14.2$		
Total	3. 3	4.3	33.7	10. 2		
B. All funds: Funds with assets of less than \$10,000,-						
Funds with assets of \$10,000,000 and			.2	1:3		
less than \$50,000,000	.1	.9	. 6	1. 3		
Funds with assets of \$50,000,000 and less than \$300,000,000	2.3	6.6	17. 7	10.0		
Funds with assets of over \$300,000,000	.8	4.3	15.1	18.		

<sup>1</sup> No sales by secondary offerings were effected by funds in type classes not listed in the table. <sup>2</sup> Size as of September 1958.

Calculations based on figures prior to rounding.

Nore.-Columns may not add to totals because of rounding.

In 1953 sales of stocks by secondary offerings accounted for 4.3 percent of the funds' total sales, and by 1958 the corresponding percentage had risen sharply to 10.2 percent. As indicated in table IV-49, this increase in relative importance is due to the activity of the common stock funds, whose sales by secondary offerings rose from \$1.8 to \$28.7 million, and from 4.1 to 13.3 percent of total sales. This trend was due to the activity of the larger funds in the "growth" and "mixed" objective classes, where secondary offerings in 1958 accounted for the fairly high proportions of sales of 16.2 and 14.2 percent, respectively.

The rearrangement of the data to exhibit the significance of the secondary offering technique for funds of differing sizes (table IV-49, pt. B) indicates clearly the importance of the larger funds. In 1958 the largest size class of funds employed this technique for the very large proportion of 18.5 percent of their sales. As is to be expected, the secondary offering has only occasional and small significance for the smallest funds.

## FREQUENCY DISTRIBUTIONS OF INVESTMENT FUNDS' SALES ON THE NEW YORK STOCK EXCHANGE AND IN THE OVER-THE-COUNTER MARKETS BY SIZES OF FUNDS

The foregoing analysis of the relations between the market distribution of portfolio activity and the size of investment fund is supplemented briefly in this section by an examination of the frequency distributions of funds by sizes, according to the percentages of their common stock sales placed (a) on the New York Stock Exchange (table IV-50), and (b) in the over-the-counter markets (table IV-51). The analysis is divided as previously in the case of portfolio purchases into the respective size classes for balanced funds, for common stock funds, and for all funds combined.

**TABLE IV-50.**—Frequency distribution of open-end investment funds by percentage of common stock sales effected on the New York Stock Exchange, all funds, balanced funds, and common stock funds, by size' of fund, April-June 1953 and April-June 1958

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Percent of sales on New York		1953					1958					
Stock Exchange	Total	(a)	(b)	(c)	(d)	Total	(a)	(b)	(e)	(d)		
. All funds:								_				
100.	58	30	17	11		48	31	12	5			
90 and less than 100	19	3	5	9	2	23	5	7	10			
80 and less than 90	18	52	6	4	3	23	3	8	10			
70 and less than 80 60 and less than 70	4	4	3	4	1	12 11	3 4	$\frac{2}{3}$	6 2			
50 and less than 60	6	1	4	1	·i	5	2	1	$\frac{1}{2}$			
40 and less than 50	l ĭ	-	1 1	i	*	6	2 2	$\frac{1}{2}$	ĩ			
30 and less than 40	1	1				6	2	ŝ	î			
20 and less than 30	1	1				5	3	2				
10 and less than 20	1			1		1	1					
Less than 10, but not 0	1		1			1		1				
0	4	2		2		7	3	2	2			
Total	121	45	36	33	7	148	59	43	39			
. Balanced funds:												
100	22	12	7	3		17	13	2	2			
90 and less than 100	4	$^{2}_{2}$	1	13		8	3	23	2			
80 and less than 90 70 and less than 80		2	3	3	2	8	1 1	3	4			
60 and less than 70	i			1		5	3	1	9			
50 and less than 60	i	1				ĭ	J	-	1			
40 and less than 50		-				$\tilde{2}$	1	1	-			
30 and less than 40	1	1				1	1					
20 and less than 30	1	1				4	2	2				
10 and less than 20	1			1		1	1					
Less than 10, but not 0	<u>-</u> -											
0	1			1						~		
Total	42	19	11	10	2	51	26	11	12			
. Common stock funds:												
100	20	6	8	6		22	11	9	2			
90 and less than 100		1	4	8	2	14	2	5	7			
80 and less than 90		3	3	4		14	2 2 2	4	63			
70 and less than 80 60 and less than 70		1 1	3	4	1 1	5	ĩ	2	1			
50 and less than 60			4		1	4	$\frac{1}{2}$	ĩ	i			
40 and less than 50			-	1	-	Â	ĩ	Î	ĩ			
30 and less than 40						5	ī	3	ī			
20 and less than 30												
10 and less than 20			;-									
Less than 10, but not 0	1		1			ī		1				
•••••••••••••••••••••••••••••••••••••••												
Total.	58	11	23	19	5	77	22	28	22			

<sup>1</sup> Size as of September 1958.

 Nore
 See the following:

 (a) = Funds with net assets less than \$10,000,000.
 (b) = Funds with net assets \$10,000,000 and less than \$50,000,000.

 (c) = Funds with net assets \$50,000,000 and less than \$300,000,000.
 (d) = Funds with net assets over \$300,000,000.

TABLE IV-51.—Frequency distribution of open-end investment funds by percentage of common stock sales effected in the over-the-counter markets, all funds, balanced funds, and common stock funds, by size ' of fund, April-June 1953 and April-June 1958

Percent of sales in over-the-counter		1953					1958					
markets	 Total	(a)	(b)	(c)	(d)	Total	(a)	(b)	(c)	(d)		
. All funds:				1								
100	. 2			2		5	2	1	2			
90 and less than 100			1									
80 and less than 90				1								
70 and less than 80						2	1	1				
60 and less than 70		1				4	12	$\frac{2}{2}$	1			
50 and less than 60			2	1		5	4		1			
30 and less than 40		1				8	43					
20 and less than 30		1	1	2	ī-	ŝ	2	2	3			
10 and less than 20		1	5	4	3	16	2	7	5			
Less than 10, but not 0		5	5	7	3	24	4	5	13			
0		37	21	16		69	38	19	12			
Total	121	45	36	33	7	148	59	43	39			
Balanced funds:				<u> </u>								
100	1			1								
90 and less than 100				Į I								
80 and less than 90				<u>-</u> -								
70 and less than 80				1		1		1				
60 and less than 70		1				2	1	1				
50 and less than 60						ĩ	î	-				
40 and less than 50						1 î	î					
30 and less than 40		1				5	$\bar{2}$	2	1			
20 and less than 30						2	1		_			
10 and less than 20	6		2	2	2	3	1	2				
Less than 10, but not 0		2	2	1		11	3	1	6			
0	. 27	15	7	5		25	16	4	5			
Total	42	19	11	10	2	51	26	11	12			
Common stock funds:												
100	·											
90 and less than 100			1	• <i></i>								
80 and less than 90												
70 and less than 80												
60 and less than 70 50 and less than 60						24		1	1	;		
40 and less than 50			2	1		4	1 3	$\frac{2}{1}$		1		
30 and less than 40			1			3	1	1	1			
20 and less than 30			1	2	1	37	i	$\frac{1}{2}$	3	1		
10 and less than 20		1	3	ĩ	1	11	i	4	3 4			
7 ess than 10, but not 0	15	3	3	6	3	11	i	3	6	Í		
0.		7	12	9		34	14	14	6			
Total	58	11	23	19	5	77	22	28	22	{		

<sup>1</sup> Size as of September 1958.

Note as of expendent rese. Note:-See the following: (a) = Funds with net assets less than \$10,000,000. (b) = Funds with net assets \$10,000,000 and less than \$50,000,000. (c) = Funds with net assets \$50,000,000 and less than \$300,000,000. (d) = Funds with net assets over \$300,000,000.

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The principal respect in which the market distribution of portfolio sales corresponds with that of portfolio purchases is in the emergence again of the negative relationship between size of fund and the relative importance of New York Stock Exchange activity, and the positive relation between size of fund and the percentage of sales effected in the over-the-counter markets. Once again these relationships are reflected in the frequency distributions of tables IV-50 and IV-51. Because of the analogous nature of the analysis, however, it need not be presented at any length at this point. It will suffice to note the summary in table IV-52 of some principal implications of the distributions.

In the 1958 period some 32.4 percent of the funds placed 100 percent of their sales on the New York Stock Exchange, but this degree of concentration of sales declined from 52.5 percent of the funds in the smallest size class to 12.8 percent of the funds in the second largest class, while none of the funds of the largest size group confined their sales activity completely to this market. In the remaining data in table IV-52 relative to the sales activity on the New York Stock Exchange, similar progressions may be noted in respect of the balanced funds and the common stock funds separately. Table IV-52 exhibits in respect of the over-the-counter sales activity also the same relationships as previously adduced. Of the smallest size group of funds, some 64.4 percent avoided the over-the-counter markets entirely. The corresponding percentages declined progressively for the larger funds, and none of the largest group of funds completely ignored this market channel.

## A STUDY OF MUTUAL FUNDS

TABLE IV-52.—Percentages of funds placing given percentages of total common stock sales on the New York Stock Exchange and in over-the-counter markets, all funds, balanced funds, and common stock funds, by size <sup>1</sup> of fund, April-June 1958

Size of fund	Percentage of funds placing 100 percentage of funds placing 100 percentage York Stock Exchange						
	All funds	All common stock funds	All balanced funds				
Funds with assets less than \$10,000,000 Funds with assets \$10,000,000 and less than \$50,000,000 Funds with assets \$0,000,000 and less than \$300,000,000 Funds with assets over \$300,000,000	52.5 27.9 12.8 0	50.0 32.1 9.1 0	50.0 18.2 16.7 0				
Total	32. 4	28.6	33. 3				
Size of fund	Percentage of funds placing 90 per more of their common stock sales New York Stock Exchange						
	All funds	All common stock funds	All balanced funds				
Funds with assets less than \$10,000,000. Funds with assets \$10,000,000 and less than \$50,000,000. Funds with assets \$50,000,000 and less than \$300,000,000. Funds with assets over \$300,000,000.	44. 2 38. 5	59. 1 50. 0 40. 9 0	61, 5 36, 4 33, 3 50, 0				
Total	48.0	46.8	49.0				
Size of fund	Percentage of funds which did not use the over-the-counter markets for any portion of their common stock sales						
	All funds	All common stock funds	All balanced funds				
Funds with assets less than \$10,000,000 Funds with assets \$10,000,000 and less than \$50,000,000 Funds with assets \$50,000,000 and less than \$300,000,000 Funds with assets over \$300,000,000	44.2 30.8	63. 6 50. 0 27. 3 0	61.5 36.4 41.7 0				
	46.6	44.1	49.0				
Total			Percentage of funds placing less than 1 percent of their common stock sales in the over-the-counter markets				
Total	percent of	their common	stock sales in				
	percent of	their common	stock sales in				
	All funds 71. 2 55. 8 64. 1	their common e-counter mark	stock sales in rets All balanced				

<sup>1</sup> Size as of September 1958.

The clustering of funds in high-percentage model classes in the New York Stock Exchange data in table IV-50 is again reflected in low-percentage modal classes in the over-the-counter data in table IV-51. In this case, however, unlike the conclusions recorded in the case of the market distributions of portfolio purchases, there did occur between 1953 and 1958 a more significant movement of the relative importance of activity from the New York Stock Exchange to the over-the-counter markets. The movement is implicit again in the frequency distributions, though the averages (medians) of the distributions suggest a higher average importance of the exchange and a lower average importance of the over-the-counter markets than was disclosed by the industry and type class aggregate data previously examined. (See table IV-47.) This fairly wide discrepancy between the median and the weighted mean of the distributions reflects, of course, the marked skewness of each of the distributions which have been examined throughout this section of the analysis. A summary of the relevant median percentages, based on the grouped data, is given in table IV-53.

 TABLE IV-53.—Median percentage of common stock sales placed on the New York

 Stock Exchange and in over-the-counter markets, all funds, balanced funds, and

 common stock funds, April-June 1953 and April-June 1958

Type of fund	Median percentage of common stock sales								
	New York Sto	ock Exchange	Over-the-	counter					
	1953	1958	1953	1958					
All funds Balanced funds Common stock funds	99 100 94	89 89 88	0 0 1	2 1 4					

PORTFOLIO TURNOVER RATES

The rates of turnover of investment fund portfolios are examined in this section as an aspect of investment policy and as a partial index of the significance of investment funds in total security market activity. The importance of funds of differing types and sizes for market behavior and for market price formation depends on the frequency and size of portfolio transactions and the manner in which they are implemented. This depends not only on the continual need to invest the rapidly increasing asset totals resulting from the funds' sales of their own new shares, but also on management action directed to changing existing portfolio structures. The term "portfolio turnover" embraces only those transactions executed in order to change existing portfolio structures, and it is this aspect of investment policy that is here reviewed.

The concept of portfolio turnover looks, therefore, at the volume of portfolio transactions net of those purchases and sales which might be judged to result from the investment of new money inflows on the one hand and from the need to liquidate security holdings in order to meet an outflow of money on the other. The measure of portfolio turnover rates used initially in this study was computed as follows:

$$PTR = \frac{(P+S-NI)/2}{(A_1+A_2)/2}$$

Explanation of symbols:

PTR=Portfolio turnover rate.

P =Total purchases of portfolio securities.

S =Total sales of portfolio securities.

NI=Net inflow (or net outflow) of money resulting from the sale (or repurchase) of own shares.

 $A_1$  = Net assets at the beginning of the period.

 $A_2$  = Net assets at the end of the period.

The formula relates one-half of the total value of portfolio transactions <sup>36</sup> during any period (after adjustment for the net inflow or net outflow of money during the period) to the average value of assets held by the fund or group of funds at the terminal dates of the period. Clearly, the interpretation of the measure of portfolio turnover is complicated by several factors. Firstly, it cannot be ascertained with precision, from the data available for this study, to what extent gross inflows of money do exert a portfolio impact, or to what extent, similarly, outflows of money actually give rise to portfolio liquidations. Secondly, the changing levels of asset values during any period for which a turnover rate is desired will be affected not only by varying degrees of capital changes (inflows and outflows) but by varying influences from market price changes, the pattern and timing of which will vary from one portfolio structure to another. Thirdly, the funds' shifts of assets between cash or near cash items and portfolio securities will also affect the structure and portion of asset totals relevant for portfolio turnover computations.

The foregoing portfolio turnover rate formula, therefore, represents only an approximation to a true measure of an index of management action, in that the base to which portfolio transactions are related is taken as total assets, rather than the total of portfolio securities. It should be noted, however, that any distortion introduced in comparing turnover rates of different periods is minimized by the funds' having maintained a fairly stable cash position, varying between 2.7 percent of assets at the initial benchmark date of December 1952 and 1.7 percent at the conclusion of the period, September 1958.<sup>37</sup> Furthermore, the potential distortion of the portfolio turnover rate by reason that total assets rather than the total of portfolio securities have been used as a base, is alleviated by the fact that total portfolio transactions have been taken to include operations in Government securities of all maturity dates, the principal noncash liquidity item of the funds, as well as other shorter term near-liquid portfolio items. At the same time, however, the inclusion of transactions in short-term Government securities in the turnover rate computations may give an upward bias to the results. Similarly, different sections of investment portfolios, for example corporate senior securities on the one hand and equities on the other, are no doubt turned over by the funds at rates which vary significantly from time to time. For this reason it will be necessary to construct a further analysis of the turnover rates for equity sections of the funds' portfolios in order to effect a comparison with an average turnover rate for such securities in the market as a whole, measured for this purpose by reference to New York Stock Exchange data.<sup>38</sup>

<sup>&</sup>lt;sup>19</sup> The amount involved in a turnover appears in both purchases and sales, and the averaging of port folio transactions therefore introduces the adjustment necessary to avoid double counting. <sup>30</sup> The comparison of turnover rates among various size funds, however, may overstate the actual differences. It was noted earlier (see tables IV-1 through IV-4) that the cash positions of the funds as a percentage of total assets was negatively related to investment fund size. The general conclusion that there is a negative relation between the size of fund and turnover rate is, nevertheless, justified. <sup>31</sup> The maximum number of funds included in this turnover rate analysis was 172 funds in 1958. This is 17 funds less than the total included in the maximum nuiverse described in the industry growth analysis in ch. III, and is accounted for by the unavailability in those cases of portfolio turnover data and net inflow data in comparable and usable forms. 2 large funds were formed in 1958 and could not be included in this analysis. The remaining funds excluded were principally small funds. The largest of these held assets of \$55,000,000 at the final benchmark date of September 1958, and these 15 funds together accounted for only 1.7 percent of the total assets of the universe of this study as of that date. While the exclusion of these funds does not seem sufficiently significant to affect seriously the overall conclusions of the analysis, it should be noted that insofar as the small funds may have led to an understatement of the weighted average turnover rates for all funds combined.

The portfolio turnover rate employed initially adjusts the total of portfolio transactions for the funds' capital changes by assuming that in any given period it is only the net inflow of money, or the net outflow as the case may be, which exerts a portfolio impact. Alternative assumptions might be made, and consideration will be given below to the manner in which the findings of the present analysis may have been affected by varying alternative procedures. The principal conclusions, however, remain unaffected: First, turnover rates have been inversely related to size of fund; second, turnover rates rose between 1953 and 1958, particularly in the case of the common stock funds and the larger size classes of funds; and third, the balanced fund turnover rates were larger than those of the common stock funds at the beginning of the study period but by 1958 the relationship had been reversed.

Basic data relative to the funds' turnover rates by the principal type groups and size classes of funds considered throughout this study are given in tables IV-54 and IV-55. The universe and the various subgroups of funds are here described in terms of the combined (weighted average) rates for each class (table IV-54)<sup>39</sup> and the unweighted arithmetic mean and median rates for the same funds in each of the groups (table IV-55).

TABLE IV-54.—Combined	annual	portfolio	turnover	rates of	open-end	investment
funds,	by type	and by si:	re of fund	, $1953-5$	8	

[In percent]

	1953	1954	1955	1956	1957	1958 1
Type of fund:						
All funds	17.6	22.2	17.6	18.3	21.4	23.6
Foreign security funds	26.0	14.6	31.8	30.4	14.4	14.4
Specialty funds	8.7	10.4	7.1	9.8	8.1	10.9
Specialty funds Bond and preferred stock funds	28.3	20.1	24.6	20.8	28.4	23.9
Balanced funds	20.8	28.2	20.9	20.5	20.1	22.1
Income	19.1	30.3	16.8	19.3	17.7	19.7
Growth 2	55.7	45.3	41.2	40.7	51.4	49.6
Mixed	20.2	27.3	21.2	20.1	19.6	21.7
Common stock funds.	15.4	19.5	15.8	17.3	23.9	26.3
Income	28.0	28.7	14.9	21.4	22.0	31.0
Growth	14.8	19.2	17.7	17.5	22.4	25.0
Mixed	14.3	15.9	13.9	15.1	26.5	25.9
Size * of fund:			101.0	2012		
All funds	17.6	22.2	17.6	18.3	21.4	23.6
Funds with net assets less than \$10,000,000	46.7	42.2	38.6	32.1	47.0	44.2
Funds with net assets \$10,000,000 and less than	2011		00.0	02.11	,	
\$50,000,000	32.0	34.1	24.8	27.1	28.8	28.5
Funds with net assets \$50,000,000 and less than					-0.0	_0.0
\$300,000,000	18.4	23.1	17.1	20.1	25.4	28.8
Funds with net assets over \$300,000,000	10.9	17.1	14.8	13.2	13.7	15.5
Balanced funds	20.8	28.2	20.9	20.5	20.1	22.1
Funds with net assets less than \$10,000,000	44.1	48.8	44.7	38.9	41.3	45, 6
Funds with net assets \$10,000,000 and less than		10/0		0010		
\$50,000,000	47.0	49.4	26.9	29.2	32.3	30.2
Funds with net assets \$50,000,000 and less						
than \$300,000,000	19.1	24.3	17.8	19.0	19.9	21.8
Funds with net assets over \$300,000,000	13.6	23.0	20.2	18.5	16.5	19.1
Common stock funds	15.4	19.5	15.8	17.3	23.9	26.3
Common stock funds Funds with net assets less than \$10,000,000	27.2	45.1	27.8	30.4	51.3	50.4
Funds with net assets \$10,000,000 and less than						
\$50,000,000	28.7	31.1	24.2	27.6	32.3	30.4
Funds with net assets \$50,000,000 and less than						
\$300,000,000	20.4	24.3	19.0	22.6	40.6	37.8
Funds with net assets over \$300,000,000	9.0	12.9	11.1	9.6	11.8	12.9

9 months, equivalent annual rate.
 2 Based on a maximum of 6 funds and dominated by 1 fund.
 3 Size as of September 1958.

<sup>39</sup> The combined rate, or the equivalent weighted average rate, is obtained by using the following formula:  $(\Sigma P + \Sigma S - \Sigma / NI /)$ P.T.R.t

$$T.R.(wt) = \frac{(\Sigma A_1 + \Sigma A_2)}{(\Sigma A_1 + \Sigma A_2)}$$

where all terms are defined as in the original formula. The portfolio transactions of the funds within each group are thus adjusted for the summation of the individual funds' net inflow or net outflow as the case may be. With this exception, the combined turnover rate for a group of funds is calculated in precisely he same way as that of an individual fund.

Wide differences appeared between the turnover rates in the various type classes of funds. Concentrating on the weighted average data (table IV-54) specialty funds displayed consistently low turnover rates throughout the period studied, the rate exceeding 10 percent only twice, and never rising as high as 11 percent. The foreign security funds turned over their portfolios quite rapidly in 1955 and 1956, the rate for each of those years having exceeded 30 percent. This high relative portfolio activity was no doubt associated with the formation of new funds and the initial stabilizing of portfolio structures in this sector of the industry at, and immediately preceding, those periods. Higher trading activity induced by market volatility at the time may have added to the turnover, but by 1957 (in which even wider market swings than in 1956 occurred) and 1958, the foreign security funds had established turnover rates of slightly less than 15 percent, more in line with the rates for the industry as a whole.

The combined rates of the bond and preferred stock funds have been uniformly high, varying between 20 and 30 percent for the entire period. The weighted turnover rates for these funds, however, were greatly influenced in some years by 1 or 2 of the 11 funds in the group, and the unweighted arithmetic mean and the median rates (table IV-55) were sometimes higher and sometimes lower than the corresponding statistics for the entire industry.

The turnover rates for common stock funds rose considerably toward the end of the period under study, reaching 23.9 percent in 1957 and an annual rate of 26.3 percent for the first 9 months of 1958 compared to a rate of only 15.4 percent in 1953 (table IV-54). In the strongly rising stock market conditions of 1954 the common stock funds combined turnover rate reached the higher level of 19.5 percent and then declined to 15.8 percent in 1955. Each of the subtype classes of common stock funds revealed the same pattern. The turnover rates increased in 1954, and in the following year they returned to rather lower levels. This apparently contrasting portfolio behavior in 1954 and 1955, both of which years saw generally upward trends in stock market prices, is no doubt explained by the fact that fund managements considered the adjustments of portfolios to rising market conditions and economic prosperity had been reasonably well accomplished by the end of 1954, and by the fact that managements' attention was diverted in the following year to investing the sharply larger net inflow of money which accompanied the stock market boom.<sup>40</sup> In 1955 the net inflow to the common stock funds combined, \$471 million, was approximately 150 percent of the net inflow in the preceding year. The rise in the common stock funds' turnover rates in the latter part of the study period, particularly in the resumed upward movement in the stock market in 1958, produced a higher average rate than that generated by any other type of fund during the final 9 months of the study.

<sup>40</sup> This same pattern of change of turnover rates between 1953 and 1955 will be noticed below in the turnover rate analysis of the equity sections of the funds' portfolios.

			ll	In percent	 							
	19	53	1954		1955		1956		1957		1958	
	Mean	Median	Mean	Median	Mean	Median	Mean	Median	Mean	Median	Mean	Median
'ype of fund:		~										
All funds	28.3	19.2	31.1	22.5	26.7	18.1	27.0	20.8	32.8	22.0	33.7	24
Foreign security funds	26.0	26.0	14.6	14.6	44.7	24.0	25.3	26.5	22.5	17.2	20.4	18
Specialty funds	9.5	7.2	13.3	11.3	13.7	11.6	17.1	13.8	16.4	10.5	13.9	13
Specialty funds Bond and preferred stock funds	28.5	14.5	21.9	16, 1	27.8	22.6	22, 2	18.6	33. 3	16.0	24.9	14
Balanced funds	35.1	24.6	39.9	35.2	29.9	23.6	30.9	25.3	32.5	22.0	38.7	26
Income	22.2	23.4	36.3	36.4	21.9	20.6	26.9	20.5	23.1	18.4	33.5	24
Growth	51.8	46.3	43.2	43.5	49.4	44.3	52.2	61.4	44.9	46.1	52.2	50
Mixed	38.0	25.4	40.8	32.2	30.8	22.5	29.1	23.8	34.0	24.2	38.2	26
Common stock funds	29.9	23.3	32.3	22.5	28.0	15.0	28.5	21.3	39.3	26.4	39.0	20
Income	34.3	24.6	39.5	24.3	19.5	15.0	25.0	23.2	29.1	26.3	41.6	29
Growth	30.2	17.2	30.4	19.8	30.4	14.5	31.6	20.2	41.1	25.4	37.5	20
Mixed	26.7	22.5	30.2	22.8	24.4	20.1	25.9	21.5	43.4	27.5	40.0	32
ize <sup>2</sup> of fund:	}				-21 -					20	10.0	
All funds	28.3	19.2	31, 1	22.5	26.7	18.1	27.0	20.8	32.8	22.0	33.7	24
All funds Funds with net assets less than \$10,000,000	29.8	20.2	33. 9	27.0	31.0	21.7	29.1	21.5	39.0	25.9	39.1	25
Funds with net assets \$10,000,000 and less	]								00.0		00.1	-
than \$50,000,000	34.3	25.1	33. 3	23.9	28.5	19.7	29.6	25.8	30.6	23.6	30.1	25
Funds with net assets \$50,000,000 and less										-0.0	00.1	~
than \$300,000,000	22.1	16.9	27.1	21.8	20.4	17.8	23.0	17.7	29.0	17.5	32.0	24
Funds with net assets over \$300,000,000	10.8	8, 3	17.5	14.8	14.1	11.6	13.4	12.0	14.4	13.3	16.2	12
Balanced funds	35.1	24.6	39.9	35.2	29.9	23.6	30.9	25.3	32.5	22.0	38.7	20
Funds with net assets less than \$10,000,000	39.5	27.1	42.1	36.7	36.6	27.0	38.5	29.6	39.2	29.2	48.2	37
Funds with net assets \$10,000,000 and less	(								. –			
than \$50,000,000	46.1	29.6	48.6	38.3	28.4	27.9	28.2	31.8	32.8	23.7	35.5	26
Funds with net assets \$50,000,000 and less						}						
than \$300,000,000	19.7	15.0	29.3	28.1	20.5	18.6	20.9	17.4	20.9	18.5	23.9	24
Funds with net assets over \$300,000,000	17.4	17.4	27.3	27.3	22.0	22.0	19, 1	19.1	17.6	17.6	21.1	21
Common stock funds	29.9	23.3	32.3	22.5	28.0	15.0	28.5	21.3	39. 3	26.4	39.0	29
Funds with net assets less than \$10,000,000	33.0	23.4	49.9	51.4	32. 2	27.8	33.7	25.1	52.2	38, 8	51.0	36
Funds with net assets \$10,000,000 and less								1				
than \$50,000,000	34.7	26.3	30.8	23.3	29.2	16.0	30.6	21.7	35.5	26.9	31. 3	27
Funds with net assets \$50,000,000 and less		[										
than \$300,000,000	26.0	22.5	29.5	22.1	22.1	17.4	26.0	20.1	39.7	23.8	42.9	33
Funds with net assets over \$300,000,000	8.2	8.3	13.6	14.8	11.0	10.9	11.1	8.6	13.1	10.6	14.2	11

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TABLE IV-55.—Unweighted arithmetic mean and median annual portfolio turnover rates of open-end investment funds, by type and size of fund, 1953-58

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19 months equivalent annual rate.

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<sup>2</sup> Size as of September 1958.

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The balanced funds also recorded higher turnover rates in 1954, followed again by a fairly sharp decline in the following year. Between 1955 and the end of the study period, however, the combined rates for this type of fund did not show the same degrees of increase as the common stock funds had done. Throughout the 1952–58 study period as a whole, the balanced fund turnover rates had been generally more stable than those of the other type classes of funds. The balanced funds had a higher rate than the common stock funds and the total industry for each year 1953 through 1956, but a lower rate in the last half of 1957 and the first 9 months of 1958.

## PORTFOLIO TURNOVER RATES BY SIZES OF FUNDS

Tables IV-54 and IV-55 also classify the universe of funds by size classes according to the combined annual turnover rates (weighted averages) and the unweighted mean and median rates of the funds included in the various groups. Throughout the period studied turnover rates were inversely related to investment fund size. The funds in the smallest size group had the highest turnover rates throughout the period, never falling below 32 percent for the smallest size group of all funds combined, and rising as high as 47 percent in 1957 (weighted average data, table IV-54). The largest size class of all funds combined, on the other hand, showed the lowest turnover rates for each year.

The existence of a negative relation between investment fund size and portfolio turnover rates raises the question whether the higher turnover rates in the smaller funds were due to the formation of new funds. It might be expected that a newly formed fund would record a higher turnover rate as it shifted its assets from a temporary liquid position into permanent portfolio securities. An analysis of relevant data is therefore summarized in table IV-56. The three comparisons for 1953 and 1954 run counter to such an expectation, and the five comparisons for the years 1955 through 1957 are consistent with it. The evidence is thus quite inconclusive. It should be noted, however, that the tendency to lower turnover rates by the larger funds is not modified even in those years in which the newer small funds recorded higher turnover figures. Throughout the period 1955-57, the larger funds had generally lower rates than those smaller funds which had been in existence for several years.

TABLE IV-56.—Portfolio turnover rates of	of small funds	ds by date of formation, 1953–57
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[In percent]

	Unweighted arithmetic mean turnover rates							
	1953	1954	1955	1956	1957			
<ol> <li>Funds with assets less than \$10,000,000 at December 1955 (date of formation):         <ul> <li>(a) Before 1952.</li> <li>(b) 1952-55.</li> </ul> </li> <li>Funds with assets less than \$10,000,000 at December 1957 (date of formation):</li> </ol>	27. 8	31. 8	24.5	(1)	(1)			
	( <sup>1</sup> )	24. 3	54.4	(1)	(1)			
(a) Before 1952	29.5	33.8	25.6	28. 2	37.			
	14.5	21.3	47.6	29. 5	45.			
	( <sup>1</sup> )	(1)	(1)	( <sup>1</sup> )	74.			

<sup>1</sup> Not applicable.