

H. COMPENSATION

1. Regulation of Fees

Legal restrictions are imposed on the compensation received by trustees. In some states a general test of reasonableness is used, while in other states statutes include specific formulas concerning trustees' compensation.

In California, for example, if the governing instrument does not specify the trustee's compensation, the trustee is "entitled to such compensation as may be reasonable under the circumstances."¹⁹² If the instrument does specify the compensation, the trustee is entitled to the amount specified.

New York provides for annual commissions of $\frac{1}{2}$ of 1 percent on the first \$300,000 of principal, $\frac{1}{4}$ of 1 percent on the next \$500,000, $\frac{1}{5}$ of 1 percent on the balance, and additional commissions of 1 percent of the principal distributed by a trustee.¹⁹³ The formula does not apply if the governing instrument specifies other compensation.

2. Fees Charged

Bank management and trustee fee rates are generally calculated as a percentage of assets. In this section fee rates are given, making it possible to compare fees of banks with those of other managers. The more extensive statistical analysis of the next section involves the relationship between fees and various characteristics of the accounts, such as size, turnover and investment authority.¹⁹⁴

Table V-27 presents bank trustee and management fees for 1969 as a percent of assets, by account type and size.¹⁹⁵ The table indicates sharp declines in fee rates in all account categories as the accounts grow.¹⁹⁶ For purposes of comparison, Table V-28 indicates the 1969 fees charged by the 32 investment advisers that each managed aggregate assets in excess of \$750 million.¹⁹⁷ The category of individuals and personal trusts in Table V-28 consists principally of personal agency accounts.

Although the size categories are not completely identical and the sample of bank-administered accounts is smaller than the sample of investment advisers' accounts, it is possible to make some comparisons. In employee benefit accounts, the 50 banks' fee rates were lower for accounts between \$1 million and \$25 million (especially between \$5,000,001 and \$25 million), while for larger accounts the fee rates are similar. A comparison of the investment advisers' individual and per-

¹⁹² Cal. Civ. Code § 2274 (West Supp. 1970); Cal. Prob. Code § 1122 (West Supp. 1970).

¹⁹³ The figures relate to trusts under wills of persons dying after August 31, 1956, and to living trusts established after that date. Surrogate's Court Procedure Act § 2309 and Civil Practice Law and Rules, § 8005.

¹⁹⁴ This and the next section deal with direct compensation. The significance of indirect compensation is discussed in sec. H of this chapter.

¹⁹⁵ Table V-27 is derived from the fiscal 1969 fees reported on Form I-25 and from total assets on Form I-21. The accounts reported comprise the usable responses received in the final stage of the account sampling process described in sec. B of this chapter.

¹⁹⁶ Certain average rates in Table V-27 do not reflect a pattern; some, as indicated in the table, relate to small numbers of observations.

¹⁹⁷ Table V-28 is based on the Form I-14 sample. These fees, unlike fees of banks, do not ordinarily include custody charges.

sonal trust accounts with the banks' personal agency accounts indicates that the banks' fee rates were lower in accounts under \$5 million (especially between \$1,000,001 and \$5 million) and the same in accounts between \$5,000,001 and \$25 million.¹⁹⁸

On an aggregate basis, fees as a percent of assets charged by the 50 banks were .21 percent in 1969.¹⁹⁹ The average fee rate for employee benefit accounts was .10 percent,²⁰⁰ for personal trust and estate accounts .35 percent²⁰¹ and for agency accounts .20 percent.

3. The Relationship Between Fee Rates and Account Characteristics

In analyzing the relationship between fees and various characteristics of an account, this section uses multiple regressions, which permit the simultaneous consideration of the effects of a number of factors. The basic quantity whose variation is analyzed is the ratio of total management and trustee fees in 1969 to total account assets. The Study attempted to test several hypotheses concerning the factors influencing fee rates:

(a) Total assets in the account. This was expected to be the most important explanatory variable. It is the primary factor in most fee

¹⁹⁸ The average size of the banks' accounts in Table V-27 is as follows (in thousands of dollars):

Account Size	Employee Benefit	Institutional and Corporate Agency	Personal Agency	Personal Trust and Estate
\$0 to \$100,000.....	80	90	70	50
\$100,001 to \$500,000.....	320	280	240	230
\$500,001 to \$1,000,000.....	710	780	700	680
\$1,000,001 to \$5,000,000.....	2,680	3,360	2,800	2,320
\$5,000,001 to \$25,000,000.....	12,450	10,600	9,330	12,330
\$25,000,001 to \$100,000,000.....	48,570	42,220	59,480	41,380
Greater than \$100,000,000.....	340,940	121,750	141,430	114,890

For comparison the average size of the accounts of investment advisers in Table V-28 are set forth (in thousands of dollars):

Account Size	Employee Benefit	Individual and personal Trust
\$0 to \$500,000.....	240	220
\$500,001 to \$1,000,000.....	720	700
\$1,000,001 to \$5,000,000.....	2,220	1,830
\$5,000,001 to \$25,000,000.....	11,100	8,790
Greater than \$25,000,000.....	87,560	62,700

¹⁹⁹ The percentage is based on Form I-60. Total trust department assets in Table A1 and total trust department revenues in Table A6 were used. Five banks were not included in these calculations because they could not separate purely custodial fees. These banks ranged from the sixteenth to the forty-seventh in order of trust department size. Similar calculations were made for the three account types.

²⁰⁰ The relatively large average size of employee benefit accounts is a significant factor in explaining why their average fee rates are lower than those of the other account types.

²⁰¹ As indicated in sec. C.1 of this chapter, in connection with personal trust and estate accounts banks sometimes provide services in addition to investment advice. These services include determining, under some trust instruments, the amounts of principal and income to be paid beneficiaries, preparing tax returns, and assisting in connection with court proceedings.

schedules, which reflect the economies of scale in administering larger accounts.²⁰²

(b) The number of stocks in the portfolio. The Study's hypothesis was that costs of administering an account are related to the number of stocks of different issuers in the portfolio. The number of stocks was expected to be important in determining the amount of necessary clerical work, such as paying dividends, and the amount of necessary following of companies. Use of the number of stocks in the portfolio as a variable identifies portfolios dominated by a large holding, such as stock in a family associated company, for which banks may charge a lower fee. It was expected therefore that an increased number of stocks would increase the fee rate.

(c) Investment authority. The fee schedules of several banks suggested that fees would be reduced for accounts in which the bank has complete investment authority compared to those in which prior consultation is required. Consultation is presumably time-consuming for the account manager. It may also result in account managers' having to initiate a larger number of trades in the same stock for different accounts (and to handle a larger number of stocks in the same account).

(d) Designation of brokerage. The extent to which the customer designates brokers for trades was expected to have a possible effect on fees for two reasons. One is that the bank loses the use of brokerage commissions which it may consider valuable. The other is that designation of the broker may make trading for the account more expensive for the manager.

(e) Turnover of the equity portfolio.²⁰³ Increased turnover was also expected to be associated with increased fees. Turnover affects trading costs and may also reflect the intensity of review and evaluation of the account.

The data used were derived from responses to the account questionnaires submitted in the third stage of the account sampling process, combined with descriptions of the account that had earlier been submitted on Form I-4. Total management and trustee fees for 1969 were given in Form I-25 and total assets in Form I-21. The number of stocks in the portfolio at the end of 1969 and the amounts used in calculating 1969 turnover appear on Form I-26.²⁰⁴ The extent of brokerage designation and investment authority were derived from responses to Form I-4.²⁰⁵

The regression results are given in Table V-29,²⁰⁶ which shows that

²⁰² See sec. E of this chapter. The algebraic form used in the statistical work is consistent with the expectation that fee rates decline, but less rapidly, as assets increase. In particular, it assumes that a given percentage increase in assets will always lead to the same percentage reduction in the fee rate (which is itself a percentage) from the previous level, regardless of the initial level of assets, that is, an increase in assets from \$100,000 to \$200,000 is assumed to reduce the fee rate by the same percentage as an increase in assets from \$1 million to \$2 million. If a fund of \$100,000 pays an annual fee of .5 of 1 percent and the fund then grows to \$200,000 and pays an annual fee of .45 of 1 percent, under the assumption it would pay an annual fee of .405 of 1 percent if it grows to \$400,000. In both cases, the fee is assumed to decline by 10 percent from its former level.

²⁰³ Preliminary runs included the percentage that equities represented of total assets. This adjusted for the use of equity turnover alone; it had no significant effect.

²⁰⁴ The method of calculating turnover rates is described in sec. F.2 of this chapter.

²⁰⁵ The midpoint in each of the five categories of designation described in sec. C.4.b of this chapter was used to construct a single variable between 0 and 1, with 1 indicating complete designation of brokers by the client.

²⁰⁶ The algebraic form used is—
$$F = aA^b \cdot e^{cN + dTO + fD + gI}$$
where F is fees, A is total assets, N is number of stocks, TO is turnover, D is amount of brokerage designation and I is investment authority. The small letters, except for e, which is the base of natural logarithms, represent coefficients to be estimated. The reason for not introducing the variables such as turnover in a multiplicative (or loglinear) form is that fees would not be zero at zero turnover.

total assets in an account are the most significant variable in explaining differences in fee rates. The coefficient for employee benefit accounts, for example, indicates that on the average a 1 percent increase in assets reduces the fee rate by .346 percent from its previous level.

The number of stocks in the portfolio is the only other variable that had an effect in the expected direction in all categories of accounts. It is statistically significant (at the .05 level) in all but the institutional and corporate agency account category. The coefficient for personal trust accounts, for example, indicates that if the number of equity issues increases from 5 to 50, holding total assets constant, the fee rate increases by 28 percent.²⁰⁷

Complete investment discretion had the consistent effect of increasing the fee rate. This is statistically significant (at the .05 level) only for personal trust accounts taken individually, but the similarity in the coefficients and the fact that some of the others are nearly significant make it probable that investment discretion would be significant if all categories were taken into consideration at the same time. The coefficient for personal trust accounts indicates that fees in discretionary accounts are 24 percent higher than in accounts that require consultation.²⁰⁸ The apparent tendency to charge relatively higher fees for discretionary accounts may reflect the bargaining power of other customers who wish to be consulted before trades are made. It is also possible that banks which concentrate on discretionary accounts have higher fees.

It has been suggested that another reason for the apparent tendency of banks to charge higher fees for discretionary accounts may be that the discretionary accounts on the average are of more recent vintage and pay higher fees because the banks have not increased the fees on old accounts to current levels. However, when age of account (based on Form I-4) is added as a variable it never is statistically significant, and has effects in inconsistent directions for different types of accounts.

The designation of brokerage tended to have an inconsistent and not very significant relationship to fees. In personal trust and agency accounts the designation of brokerage by the customer was associated with higher fees. In employee benefit accounts the opposite was the case, possibly indicating the greater bargaining power of employee benefit customers that designate brokerage.

Turnover was generally insignificant if the number of stocks is also present as a variable; in personal agency accounts higher turnover appears to be associated with lower fees. If the number of stocks is omitted from the regression, in personal trust accounts, higher turnover is significantly associated with higher fees.

Altogether, these variables explain 35 percent of total variance in fee rates among accounts.²⁰⁹

²⁰⁷ This is obtained by taking the antilog of $(.0056 \times 45)$.

²⁰⁸ This is found by taking the antilog of .2223.

²⁰⁹ It is possible that the specific algebraic form used leads to the inability to explain assets. N is number of stocks, TO is turnover, D is amount of brokerage designation and I is investment authority. The small letters, except for e , which is the base of natural accurate.

Using data on certain large bank-managed employee benefit accounts analyzed in ch. VIII, an attempt was made to determine whether trust departments charge lower fees to customers which have demand deposits at or loans from the bank. The results did not meet accepted standards of significance.

4. Direct and Indirect Compensation

Banks receive payment for their trust and management services from several sources: (a) direct income from fees charged personal trust and estate, agency and employee benefit accounts;²¹⁰ (b) that part of brokers' deposits in the banks attributable to the commissions paid by trust department accounts;²¹¹ and (c) deposits in the banks on behalf of trust department accounts.²¹²

The relative importance of these three sources of compensation is examined in this section. The contributions of brokers' deposits and trust department deposits are compared to direct revenues. In each case the sample of banks used in the comparison will be consistent. For example, a few banks could not provide information on trust department deposits. Thus, the value of deposits of trust departments maintained in reporting banks is compared with direct revenues in the same banks.

Section G.3 of this chapter estimated that approximately 43 percent of brokers' deposits was attributable to the brokerage commissions paid by trust department accounts. In 1969, the 32 banks reporting deposits from all brokers (rather than a sample) had collective balances totaling \$905.6 million. Assuming 43 percent of the brokers' deposits is attributable to commissions, using the reserve ratio for reserve city banks of 17 percent, and assuming a net return on loanable funds in 1969 of 7 percent, indirect revenues resulting from brokerage commissions paid by the trust departments are estimated to have been \$22.6 million in 1969. This is 10.7 percent of direct revenues, since aggregate direct revenues from fees charged accounts were \$210.9 million²¹³ in the same 32 banks. Since section H.2 of this chapter indicates that the trust departments' direct revenues were .21 percent of trust department assets, the indirect revenues attributable to brokerage commissions paid by the trust departments were approximately .02 percent of the assets administered by the trust departments.

The 32 banks administered 8 of the 10 largest trust departments. If the calculation is repeated for these 8, indirect revenues attributable to commissions amount to 13.5 percent of direct fees. This occurs principally because employee benefit accounts, which generate a more than proportional amount of trading,²¹⁴ are more heavily represented in these banks.²¹⁵

There may be a large ratio of income from brokers' balances to direct compensation for certain types of accounts. For example, fees for employee benefit accounts larger than \$100 million averaged .06 percent of assets.²¹⁶ Using a typical activity rate of 25 percent²¹⁷ and assuming an average brokerage commission rate of .6 percent,²¹⁸ commissions of approximately .3 percent of assets per year would be paid by a portfolio invested solely in stock. Using the working hypothesis

²¹⁰ This information was furnished in Table A6 of Form I-60.

²¹¹ See sec. G.3 of this chapter.

²¹² The magnitude of the deposits was obtained from Table A1 of Form I-60.

²¹³ From Table A6 of Form I-60.

²¹⁴ See sec. F.2 of this chapter.

²¹⁵ See sec. E of this chapter.

²¹⁶ See Table V-27.

²¹⁷ See Table V-21.

²¹⁸ The calculation assumes that the large employee benefit accounts took advantage of the volume discount.

from section G.3 of this chapter that a dollar in commissions yields \$4.26 in brokers' balances, and making the same assumptions as before concerning reserve ratios and return on funds, this indirect income would be worth .07 percent of assets.

Thirty-six banks, which include all of the 10 largest trust departments, submitted detailed information concerning the deposits held by the trust department accounts.²¹⁹ The accounts, in 1969, held in the managing bank demand deposits of \$1,170.3 million and savings and time deposits of \$603.8 million, as well as \$20.6 million in certificates of deposit issued by the managing bank. Reserve ratios of 17 percent were used for demand deposits, 3 percent for savings and time deposits²²⁰ and 6 percent for certificates of deposit. After payment of any interest costs these deposits were assumed to yield to the banks 7 percent, 3 percent, and 2 percent, respectively, or \$86 million in revenue to the 36 banks. At the same time, these banks reported \$323 million in fees from the same accounts. The value of these deposit items to the banks therefore amounted to 26.6 percent of direct revenues.

There is reason to believe that the amount of trust department deposits from which banks can benefit is greater than the above totals. Banks can benefit from the "float" that may exist because of the interval between the time an account is debited for a stock purchase and the time that the bank must pay for the delivered securities. Thirty-five of 44 banks reported that in a purchase they debited the trust department account five days after the execution date (that is, they debited on the normal settlement date), while the remaining nine waited for actual delivery before debiting. However, banks have to pay for the securities only on the actual delivery date,²²¹ which may be after the normal settlement date. For example, it was estimated that on October 15, 1969, because of the recent "fails" problem, 46 percent of all trades were not settled within the normal settlement period.²²² The case of selling stock is not symmetric since 27 of the 44 banks from which responses were obtained reported that they did not credit an account until the actual payment date, while the other 17 banks credited an account on the normal settlement date.

It is difficult to make precise estimates of the "float" that is not reported in the trust department assets set forth in Table A1 of Form I-60. Three banks debiting at the normal settlement date in connection with purchases and crediting at the actual payment date in connection with sales offered estimates of the "float" balances at the end of 1969 or early 1970. Two had a "float" balance of about 10 percent of deposits given on Form I-60, and the third had a "float" balance of 40 percent.

It is also possible to make a rough estimate of "float" balances based on a typical annual purchase rate of 15 percent and an average interval of 6.5 days between normal settlement and delivery. This average interval was calculated using the above 46 percent "fail" rate and a survey by the NASD of 67 New York Stock Exchange firms which

²¹⁹ Table A1 of Form I-60.

²²⁰ It was assumed that the \$603.8 million is principally savings deposits.

²²¹ The banks take advantage of the provision in Regulation T for special cash accounts, under which a broker-dealer may purchase for a customer with the understanding that the broker is to deliver the security promptly to the customer and full cash payment is to be made against delivery. In connection with such a transaction, except as specified in the Regulation, the transaction is to be liquidated if payment is not made within 35 days of the transaction. 12 C.F.R. 220.4(c) (5) (19).

²²² Based on a memorandum to the Commission from its Division of Trading and Markets dated November 5, 1969.

reported the distribution by time since normal settlement of "fails" as of October 31, 1969.²²³ Based on these estimates it appears that the average dollar of assets was in a "float" status .98 days²²⁴ or .39 percent of the business days in a year. Stated differently, .39 percent of assets appears to have been in "float" status. The estimated "float" was approximately one half reported demand deposits held by the banks for the account of their own trust department customers.²²⁵ However, since less than half of the banks debit at the normal settlement date for purchases and credit at the actual payment date for sales and since some large customers have arranged to make use of the "float" themselves, the "float" available to the banks represents a smaller portion of the recorded deposits.²²⁶

To summarize, the Study estimates the indirect value of deposits, including the "float," to be approximately 30 percent of direct compensation.²²⁷ Based on this figure and the .21 percent of trust department assets represented by direct compensation, it was estimated that the indirect revenues attributable to deposits, including the "float," constituted approximately .06 percent of trust department assets.

In connection with custodial accounts, which were not included in the Study's estimate, banks appear to receive compensation primarily through the use they make of deposits in the accounts. Thirty-four banks reported on Form I-60 custodial fees in 1969 of \$30.6 million in total. They also reported \$664.7 million in deposits in these accounts. Assuming again a reserve ratio of 17 percent and a net return on loanable funds of 7 percent, the value of the deposits amounts to \$38.6 million (or 126 percent of fees).

Banks may have some competitive advantage over investment advisers in the banks' ability to benefit from deposits in trust department accounts. However, investment advisers or their customers can obtain some benefit from the deposits in their accounts when negotiating a fee for custodial services, which are usually provided by a bank. Presumably competition among banks for custodial business is sufficient for fees charged to reflect the value of the deposits, since custodial accounts are easily transferred, a number of banks compete for the

²²³ The categories were 0-30, 31-60, 61-90, and more than 90 days. Within each of these intervals it was assumed that a constant percentage of remaining "fails" is settled each day. The constant rate is obtained from the percentage settled in the interval. It was further assumed that no "fails" lasted longer than 180 days.

²²⁴ 15×6.5 .

²²⁵ Table V-4 indicates that of the assets held for trust department accounts, .76 percent were demand deposits in the same bank, or about twice .39 percent.

²²⁶ Since the number of "fails" recently has diminished, the "float" has become less important to the banks.

²²⁷ Of this 26.6 percent represents reported deposits in trust department accounts, and the balance is a rough estimate of the float.

It is possible to compare these conclusions concerning the use of cash with Federal Reserve Bank income and expense surveys. The most detailed 1969 survey available was prepared by the Federal Reserve Bank of New York. For "ten large New York City" banks, the allowed credit for deposits (as furnished by the banks) in estates, personal trusts, employee benefit and personal agency accounts amounted to 48.5 percent of direct compensation. The Study's estimate for nine New York City banks is 24.1 percent of direct compensation. However, in the Federal Reserve Bank survey, personal agency accounts included custodial accounts in which, as seen later in this section, revenue from deposits represents the principal source of compensation. If personal agency accounts are excluded, the allowed credit for deposits in the Federal Reserve Bank survey becomes 34.3 percent of direct compensation. Furthermore, the average rate of income assumed on deposits in the Federal Reserve Bank survey is 7.58 percent for the New York City banks. At the average rate of 7.58 percent on deposits, the Study's estimate would be increased to 28.7 percent of direct compensation. Since the Federal Reserve Bank's 34.3 percent apparently includes an allowance for "float," which the Study's 28.7 percent does not, it appears that the Study's estimate is close to the Federal Reserve's if comparable assumptions are made.

business (although recent back office congestion may have tended to reduce competition for new business), and custodian fees are not regulated. Still, obtaining the benefits of the deposits in accounts through low custody fees may involve some sacrifice to investment advisers. Without the incentive that these fees create to use a bank as custodian for accounts (other than registered investment companies),²²⁸ the investment advisers might have chosen to act as custodian of their securities, avoiding any duplication in bookkeeping resulting from the use of an outside-custodian.²²⁹

²²⁸ Registered investment companies managed by investment advisers are required by sec. 17(f) of the Investment Company Act to use as a custodian a bank, a member of the NYSE, or the registered investment company itself. Unless a bank is custodian, additional requirements are imposed by Rules 17f-2 and 17f-3, including additional audits by independent accountants.

²²⁹ Of course, other considerations may explain investment advisers' reluctance to act as custodians, but for some firms the consideration referred to may be the marginal one that prevents them from becoming custodians.

Table V-27

1/
Average Fee Rates by Account Type and Size
1969

Account Size	<u>2/</u> Employee Benefit		Institutional and Corporate Agency ^{2/}		Personal Agency ^{3/}		Personal Trust and Estate ^{3/}	
	No. of Accounts	Average Fee Rate (%)	No. of Accounts	Average Fee Rate (%)	No. of Accounts	Average Fee Rate (%)	No. of Accounts	Average Fee Rate (%)
\$0 to \$100,000	3	.54	1	.32	23	.38	68	.44
\$100,001 to \$500,000	19	.36	9	.31	38	.41	97	.42
\$500,001 to \$1,000,000	15	.35	3	.33	14	.33	33	.31
\$1,000,001 to \$5,000,000	49	.25	18	.21	26	.18	52	.22
\$5,000,001 to \$25,000,000	72	.11	30	.14	30	.13	64	.15
\$25,000,001 to \$100,000,000	41	.07	17	.07	5	.04	12	.14
Over \$100,000,000	27	.06	6	.11	1	.07	1	.09

1/ Unweighted.

2/ Accounts for which the assets held have a value less than \$50,000 are omitted.

3/ Accounts for which the assets held have a value less than \$10,000 are omitted.

TABLE V-28

1/
Average Fee Rates Charged by Investment Advisers Managing Assets in Excess of \$750 Million

1969

Account Size	Employee Benefit		Individual and Personal Trust	
	No. of Accounts	Average Fee Rate (%)	No. of Accounts	Average Fee Rate (%)
\$0 to \$500,000	754	.56	11,930	.53
\$500,001 to \$1,000,000	337	.38	2,970	.40
\$1,000,001 to \$5,000,000	466	.30	1,953	.32
\$5,000,001 to \$25,000,000	231	.16	196	.13
Over \$25,000,000	99	.06	21	.05

1/ Unweighted.

Table V-29

1/

Relationship Between Fee Rates and Characteristics of Accounts
 Dependent Variable: Percent Fee Rate (log)
 Regression Coefficients

	Number of Observations	(b) Log of Assets (in millions)	(c) Number of Stocks in Portfolio	(d) Turnover (in percent)	(f) Degree of Brokerage Designation	(g) Investment Authority 1 if Complete 0 Otherwise	(a) Constant	R ²
Employee Benefit	220	-.346 (9.30)	.0059 (2.14)	.0022 (.67)	-.2646 (1.65)	.1812 (1.24)	.166	.34
Personal Agency	133	-.332 (7.19)	.0143 (2.22)	-.0147 (2.16)	.2425 (1.35)	.2741 (1.72)	.150	.35
Personal Trust	301	-.213 (9.34)	.0056 (3.42)	.0081 (1.68)	.2562 (1.92)	.2223 (2.23)	.154	.26
Institutional and Corporate Agency	81	-.310 (4.87)	.0023 (.47)	.0020 (.35)	.0342 (.14)	.2418 (1.20)	.165	.33

1/ The letters above each column correspond to the coefficients in the equation in footnote 206. The number in parentheses below each coefficient is its t value.

I. SUMMARY AND CONCLUSIONS

At the end of 1969, trust departments of commercial banks located in the United States administered \$280 billion in assets, of which \$180 billion was common stock. This common stock exceeded the sum of the common stock administered by investment advisers, insurance companies, self-administered employee benefit plans, foundations and educational endowments.

At the same time, the 50 trust departments from which the Study collected data administered \$195 billion of assets, including \$131 billion of common stock. The 50 trust departments were the largest at the end of 1967, measured by assets administered.

1. Types of Accounts and Assets Administered

Bank trust departments offer various services involving furnishing of investment advice and making investment decisions:

(a) The bank may serve as trustee, having legal title to the trust assets but with fiduciary obligations to act for the benefit of the beneficiaries in administering the trust. Typically, the beneficiaries having an interest in the income of a trust are not the same persons who have an interest in the trust's principal. Especially when banks have the responsibility to determine the amounts of income or principal (or both) to be paid to beneficiaries, banks furnish a service not customarily offered by other investment managers.

(b) The bank may serve as an agent for its customers. Unlike a trust, an agency relationship cannot be used to provide for the disposition of the customer's property after his death, since the agency relationship terminates on the death of the bank's customer. The sole service rendered for the agency accounts is giving investment advice or making investment decisions. The agency relationship usually can be terminated by the customer at any time, while the instruments governing trusts are sometimes irrevocable and sometimes do not provide for removal of the trustee.²³⁰

(c) Banks also administer employee benefit accounts. The assets in these accounts are contributed by employers or employees (or both), for the benefit of the employees, pursuant to retirement or other employee benefit plans. A bank may act as trustee or agent in connection with these plans.²³¹

Of the \$195 billion of assets administered by the 50 bank trust departments, employee benefit accounts represent 41 percent; personal trust and estate accounts, 40 percent; and agency accounts, 19 percent. From the end of 1964 to the end of 1969, assets administered grew by approximately 50 percent. For the same period, trust department direct revenues also increased by approximately 50 percent. Employee benefit account revenues increased by 94 percent during this five-year period; agency account revenues, 46 percent; and trust and estate account revenues, 43 percent.

The largest number of personal trust and estate accounts and the largest number of agency accounts are in the \$50,000-\$500,000 range.

²³⁰ A distinction is sometimes made between accounts where a bank acts as agent for an individual (personal agency accounts) and accounts for other customers (institutional and corporate accounts). These latter customers include business corporations, foundations, educational endowments, hospitals, museums, churches, and others.

²³¹ In general, the Study does not relate to accounts where the bank does not render investment advice or make investment decisions, such as custodian, safekeeping and escrow accounts. Nor does the Study deal with accounts where the bank acts as registrar, transfer agent, or in a similar capacity.

Excluding the small employee benefit accounts (which are primarily H.R. 10 accounts), the greatest concentration of employee benefit accounts is between \$500,000 and \$5 million.

The banks were asked to state with respect to certain of their trust department accounts whether (a) the bank had sole investment authority; (b) the bank had to consult with other parties prior to the execution of a trade; or (c) the bank had no investment authority. The trust departments have sole investment authority over approximately 80 percent of employee benefit account assets, over less than 30 percent of assets in personal trust accounts, and over less than 10 percent of the assets in agency accounts. About 60 percent of personal trust assets and 70 percent of agency assets are in accounts in which the bank gives advice and must consult others before a transaction. It is not clear how different in actual management these are from accounts in which banks have sole investment authority. Estimates by trust officers on the frequency with which customers agree with advice given have ranged from 60 to 99 percent.

Approximately 25 percent of the total brokerage of the trust departments is paid to brokers designated by the banks' customers.

The trust departments have no voting authority, either sole or in conjunction with others, in connection with approximately 50 percent of the value of the common stock in personal agency accounts, and in connection with approximately 65 percent of the value of the common stock in the institutional and corporate agency accounts. The trust departments have sole voting authority over stock constituting approximately 75 percent of the value of the common stock held in employee benefit accounts, and have sole voting authority over approximately 55 percent of such stock in personal trust and estate accounts. The \$72 billion of common stock over which the 50 banks are estimated to have sole voting authority is 55 percent of the market value of the common stock administered by the 50 trust departments.

2. Legal, Regulatory and Tax Environment

In making investment decisions, trust department personnel may have to consider a number of constraints.

The statutes of some states include legal lists of permissible categories of investments for trustees. In general, legal list statutes do not apply when a bank is acting as agent, rather than trustee. Nor do the legal list restrictions apply where the instrument creating the fiduciary relationship specifies that the fiduciary shall be free to purchase securities not included in the legal list. The 50 banks are rarely restricted by legal lists.

Frequently the prudent man rule, which is embodied by statute in many states, must be considered by bank personnel when making investment decisions. Under this rule, a trustee is under a duty to make such investments as a prudent man would make of his own property having primarily in view the preservation of the estate and the amount and regularity of the income to be derived. While it is common to specify in a trust agreement or will that a fiduciary is not subject to a legal list, instruments rarely modify the prudent man rule.

There are a number of other legal and regulatory matters which affect bank trust departments. A trustee may be required by the applic-

able state law to send periodic reports to the beneficiaries of the trust. Regulations of the Comptroller of the Currency impose certain requirements on a national bank that the Comptroller has authorized to act in a fiduciary capacity. Such requirements concern, among other things, periodic review of account assets, bonding of officers in the trust department, and self-dealing with fiduciary accounts. Bank regulatory agencies examine trust departments periodically to determine whether there are any investments not permitted by the governing instruments.

The federal income and estate tax laws provide tax incentives to create irrevocable rather than revocable trusts. In a random selection of personal trust accounts, the Study found that more than 70 percent of the trusts were irrevocable, because the settler had died or had chosen to make the trust irrevocable during his life. Bank trust departments benefit from the tax incentives to create irrevocable trusts, since such accounts are less likely to move to competing investment managers than revocable trusts. Even where the trustee of an irrevocable trust may be removed, the expenses involved in court proceedings, when required, may discourage the removal.

Bank trust departments are also subject to regulation concerning the pooling of investments. Although common trust and pooled employee benefit funds account for only 6 percent of the total trust department assets in the 50 banks, a substantial portion of the assets in small accounts is invested in such accounts.²³² Trust departments frequently reduce fees if the customer agrees to participate in a collective investment fund. The regulations of the Comptroller of the Currency relating to collective investment funds require, among other things, that the funds be valued at least every three months and that participations may begin and terminate only as of such a valuation date. The legal status of common trust funds and pooled employee benefit funds is relatively settled, but litigation is currently pending before the Supreme Court to determine the permissibility of commingling agency accounts over which a bank has sole investment authority. Where a bank offered the public a service under which it invested participants' assets in virtually identical securities, pursuant to sole investment authority, the Commission concluded that registration was required under the Investment Company Act of 1940 and the Securities Act of 1933.

3. Competition and Concentration of Assets

Banks compete not only among themselves but also with other money managers. Data in Chapters IV, VI and VIII indicate the extent to which investment advisers and insurance companies compete with bank trust departments for the administration of employee benefit accounts, and the extent to which investment advisers compete with trust departments for agency accounts. Banks have few corporate competitors, however, for trust and estate accounts. While some settlors choose non-corporate fiduciaries, such as attorneys, relatives or per-

²³² More than 50 percent of the assets in employee benefit accounts with assets under \$500,000 are invested in pooled employee benefit funds and over 30 percent of the assets in personal trust accounts with assets under \$100,000 are invested in common trust funds.

sonal friends, banks and trust companies administered 61 percent of all personal trusts submitting tax returns for the year 1962.

The largest 10 trust departments administered 37 percent of total trust department assets during 1969; the 20 largest, 51 percent; and the 50 largest, 70 percent. The 10 trust departments administering the most employee benefit account assets administered 58 percent of the industry total for 1969 in that category, the 10 administering the most agency account assets administered 39 percent of the industry total in that category, and the 10 administering the most personal trust and estate account assets administered 23 percent of the industry total in that category. Concentration does not appear to have increased over the past five years. Both in terms of trust department revenues and assets administered, the largest 20 trust departments as a whole grew at virtually the same rate as the next 30.

4. Operational Factors

Costs of clerical and mechanical operations, such as recording transactions, collecting and disbursing dividends and delivering and receiving securities, appear to be significant in trust department operations. These purely custodial functions account for approximately 60 percent of the expenses relating to employee benefit, agency and personal trust accounts. Research does not appear to be a large expense item to trust departments; research personnel account for less than 20 percent of total personnel expenses of the 50 trust departments studied.

There are in the 50 banks, on the average, 85 accounts per member of the professional staff (defined as all officers and employees serving trust department accounts who earn \$10,000 or more per year).

a. Account turnover and activity rates

In the Study's analysis of account turnover and activity rates, the sharp increase in turnover that began in 1966 and accelerated in 1967 was apparent in all account types. In the five-year period ended in 1969, employee benefit accounts had a turnover rate more than three times that of personal accounts. Forty-four percent of personal trust and 30 percent of personal agency accounts in the Study's sample had no turnover at all during 1969. Furthermore, in that year, 8 percent of personal trust and 14 percent of personal agency accounts had turnover that was greater than zero but less than 1 percent. It appears that more than 60 percent of trust department trading in equities originates in employee benefit accounts.

b. Performance

The Study analyzed the performance of a sample of 27 pooled employee benefit funds and 21 common trust funds managed by 41 of the 50 banks for a recent three-year period.²³³ The performance measure is based on the fund's rate of return compared to the rate of return that would be obtained from a hypothetical unmanaged portfolio having the same market volatility during the same period. During the period covered, the late 1960's, the funds with higher volatility achieved better performance. The funds tended to be relatively concentrated in the lower volatility ranges.

²³³ The banks submitted the last three annual reports for each of the sampled accounts. The end of the last fiscal year reported varied from October 1968 through the end of 1969.

5. The Association With Commercial Banking ²³⁴

The Study analyzes a unique characteristic of trust departments that distinguishes them from other investment managers—the combining in one corporation of trust and commercial operations.

There are several reasons why a bank's trust department may draw a portion of its customers from those who have commercial dealings with the bank.²³⁵ The Study's analysis showed that employee benefit accounts are the account type which is most closely associated with aggregate demand deposits in the bank. In addition, large demand deposits are more closely correlated with trust department assets than are demand deposits as a whole.

Analyzing factors affecting broker-dealers' deposits in banks, the Study developed the working hypothesis that 43 percent of brokers' deposits is attributable to the brokerage not designated by customers generated by trust departments. An increase of \$1 in commissions paid by a trust department and received by a broker was estimated to be accompanied, on the average, by an increase of \$4.26 in the broker's deposits in the bank. The relationship found between commissions paid and brokers' deposits does not disclose who initiates the arrangement. A broker's deposits in a bank could precede commissions received or vice versa; all that can be observed in the data is that there was a statistically significant relationship.²³⁶

Among the securities that a bank's trust department can choose to hold are stocks in companies with which the bank has commercial banking relationships. It appears that increased demand deposits by a company at a bank were, to a statistically significant degree, associated with larger holdings of the company's stock by the bank's trust department. On the other hand, loans by a bank's commercial department to a company, measured in absolute terms, did not appear to have a significant relationship to the trust department's holdings after other factors, including demand deposits, are controlled for.^{236a}

6. Compensation and Fee Ratios

Legal restrictions affect the compensation received by trustees. In some states a general test of reasonableness is used, while in other states statutes include specific formulas concerning trustees' compensation. In some jurisdictions the formula does not apply, however, if the governing instrument specifies other compensation.

On an aggregate basis, management and trustee fees as a percentage of assets administered by the 50 trust departments averaged .21 percent

²³⁴ New York banking authorities, unlike those of some other states, refuse to charter corporations to act solely as trust companies (without a commercial banking department).

²³⁵ Customers may choose to transact various financial matters with the same organization because of physical convenience and because the bank may already be well acquainted with their circumstances. The bank may know who among its commercial customers are good prospects for trust department services and it therefore may have a marketing advantage with them. In addition, banks may wish to retain or improve their goodwill with their commercial customers by offering investment management on advantageous terms.

²³⁶ See also ch. XIII. c.7.b.

^{236a} Differences between these and similar analyses reported in ch. XV. D. are discussed in that chapter.

in 1969. The average fee rate for employee benefit accounts was .10 percent,²³⁷ for agency accounts .20 percent, and for personal trust and estate accounts .35 percent.²³⁸

The Study analyzed the relationship between fees and the following account characteristics: (a) total assets in the account; (b) the number of stocks in the portfolio; (c) investment authority; (d) designation of brokerage; and (e) turnover of the equity portfolio. The analysis indicates that fee rates decrease as account assets increase; that fee rates increase as the number of stocks in the portfolio increases, holding total assets constant; that complete investment discretion appears to have the effect of increasing the fee rate; and that designation of brokerage and turnover do not have a significant effect on fee rates.

Banks receive payment for their trust and management services directly from fees charged the accounts, and indirectly from trust department accounts which have deposits in the banks' commercial departments, from the float on account transactions and from that part of brokers' deposits in the banks which are attributable to the commissions generated by trust department accounts. Indirect revenues resulting from the float and from brokers' deposits associated with brokerage commissions paid by the trust departments were estimated to be approximately 11 percent of direct revenues received in 1969. Indirect revenues from deposits of trust department accounts for 1969 were estimated to be approximately 30 percent of direct revenues received. Expressed as a percentage of assets administered these figures are equivalent to .02 percent and .06 percent, respectively. Adding the average direct compensation and the estimates of indirect compensation gives an estimated total compensation of .29 percent.

The value of the cash held in custodial accounts represents a much larger percentage of direct fees, compared to other accounts. In 1969 the value of such cash amounted to 126 percent of direct fees paid by custodial accounts. It appears that customers, including investment advisers and their clients, may benefit from the cash in their custodial accounts in negotiating the fees paid for custodial services.

APPENDIX A

List of the largest 50 trust departments (ranked by assets administered in 1967)

<i>Rank</i>	<i>Name of Bank</i>
1	Morgan Guaranty Trust Co. of New York—New York, N.Y.
2	The Chase Manhattan Bank—New York, N.Y.
3	Bankers Trust Company—New York, N.Y.
4	First National City Bank—New York, N.Y.
5	United States Trust Co. of New York—New York, N.Y.
6	Mellon National Bank and Trust Co.—Pittsburgh, Pennsylvania
7	Manufacturers Hanover Trust Co.—New York, N.Y.
8	Wilmington Trust Company—Wilmington, Delaware
9	The First National Bank of Chicago—Chicago, Illinois
10	Continental Illinois National Bank & Trust Co.—Chicago, Illinois
11	Chemical Bank—New York, New York
12	The Northern Trust Company—Chicago, Illinois
13	Old Colony Trust Company ¹ —Boston, Massachusetts
14	Harris Trust and Savings Bank—Chicago, Illinois

²³⁷ These accounts have a relatively large average size.

²³⁸ These accounts sometimes involve services besides giving investment advice and making investment decisions.

- 15 Bank of America—San Francisco, Calif.
- 16 The Cleveland Trust Company—Cleveland, Ohio
- 17 National Bank of Detroit—Detroit, Michigan
- 18 The Bank of New York—New York, N.Y.
- 19 Girard Trust Bank—Philadelphia, Pennsylvania
- 20 The First Pennsylvania Bank—Philadelphia, Pennsylvania
- 21 Mercantile-Safe Deposit and Trust Co.—Baltimore, Maryland
- 22 Security Pacific National Bank—Los Angeles, California
- 23 Crocker-Citizens National Bank—San Francisco, California
- 24 The Fidelity Bank—Philadelphia, Pennsylvania
- 25 Wells Fargo Bank—San Francisco, California
- 26 Pittsburgh National Bank—Pittsburgh, Pennsylvania
- 27 The Detroit Bank and Trust Company—Detroit, Michigan
- 28 United California Bank—Los Angeles, California
- 29 Provident National Bank—Philadelphia, Pennsylvania
- 30 Irving Trust Company—New York, N.Y.
- 31 The Connecticut Bank and Trust Co.—Hartford, Connecticut
- 32 Boston Safe Deposit and Trust Co.—Boston, Massachusetts
- 33 Northwestern National Bank of Minneapolis—Minneapolis, Minn.
- 34 Wachovia Bank and Trust Company—Winston-Salem, North Carolina
- 35 State Street Bank and Trust Company—Boston, Massachusetts
- 36 Mercantile Trust Company—St. Louis, Missouri
- 37 Rhode Island Hospital Trust National Bank—Providence, Rhode Island
- 38 Trust Company of Georgia—Atlanta, Georgia
- 39 New England Merchants National Bank—Boston, Massachusetts
- 40 Marine Midland Grace Trust Company of New York—New York, N.Y.
- 41 The National City Bank of Cleveland—Cleveland, Ohio
- 42 Hartford National Bank and Trust Co.—Hartford, Connecticut
- 43 The First National Bank of Boston¹—Boston, Massachusetts
- 44 Lincoln Rochester Trust Company—Rochester, New York
- 45 Manufacturers National Bank of Detroit—Detroit, Michigan
- 46 Fidelity Trust Company of New York—New York, N.Y.
- 47 The Toledo Trust Company—Toledo, Ohio
- 48 Fidelity Union Trust Company—Newark, New Jersey
- 49 The Bank of California—San Francisco, California
- 50 The Citizens and Southern National Bank—Savannah, Georgia

Source: Banking and Currency Staff Report.

APPENDIX B

SUPPLEMENTARY INFORMATION CONCERNING SAMPLING

This appendix supplements the description in section B of chapter V concerning the sampling of accounts.

The largest of the accounts in each category were given extra representation because, as indicated in the size distribution of accounts in Section C.3 of Chapter V, a substantial part of the total trust department assets administered is accounted for by a relatively small number of very large accounts. Since larger accounts may be managed in ways significantly different from small accounts, a special effort was made to represent the larger accounts, very few of which would have been chosen by a random selection.

There are a few sources of non-randomness in stage two of the bank account sample that produced the I-4 responses.² Adjustments are made for them when statements about trust department accounts in general are made. For example, because each bank submitted approximately an equal number of accounts, the smaller of the 50 banks are overrepresented in the sample. The major tabulations therefore included size of trust departments as one of the bases for cross-classifying accounts. In the few cases where size of bank appears to have an effect on the characteristics tabulated, this is reported. Adjustments based on total assets in each size category are made in statements about trust department assets in the aggregate.

¹ Old Colony Trust Company and The First National Bank of Boston are under common control. In general, where observations relating to individual banks are considered in ch. V these two banks are aggregated.

² The information related to varying dates in the last quarter of 1969.

In many cases it was desirable to consider the large accounts as well as the randomly selected accounts because of the large accounts' significant share of total assets, particularly employee benefit assets. When large and randomly selected accounts are considered at the same time, they are further cross-classified by size of account to remove the nonrandomness that may have been introduced. If size of account has a significant effect on whatever is being studied, aggregate statements are based on the estimated distribution of assets among the size categories.

Table V-2 is provided to indicate the number of accounts in each category when they are cross-classified by size of account and size of trust department. Some of the institutional and corporate agency categories include relatively few accounts. Less significance can be attached to the data relating to them.

Whenever nonrandomness was introduced by overrepresenting a certain stratum, an attempt to adjust for this was made by considering whether the relevant stratum has an effect on the matter being studied. For example, accounts were cross-classified by investment authority and if the variable under consideration, such as fees or turnover, appeared different in these categories, this information is used in making general statements about bank-administered assets.

Table V-3 presents the number of accounts of each type which made up the final sample and for which detailed account questionnaires were requested. There were very few institutional and corporate agency accounts available. The results based on the stage three questionnaires are frequently based on less than the total in Table V-3 because of late reporting.

CHAPTER VI
INSURANCE COMPANIES
DETAILED TABLE OF CONTENTS
THE LIFE INSURANCE INDUSTRY

	Page
A. COVERAGE AND FOCUS.....	505
B. STRUCTURE OF THE INDUSTRY	
1. Size, Concentration and Entry Conditions.....	508
2. Trends in Traditional Lines of Business and in Asset Growth.....	509
C. FINANCIAL INTEGRATION AND THE DEVELOPMENT OF EQUITY PRODUCTS	
1. Financial Integration Through Subsidiaries and Holding Companies...	511
2. Mutual Funds and Individual Variable Annuities.....	520
a. The alternatives.....	520
b. The mutual fund route.....	522
c. The variable annuity route.....	530
3. Variable Life Insurance.....	538
D. LIFE INSURANCE COMPANIES AS FUNDING AGENTS FOR PENSION-BENEFIT PLANS: THE GROUP ANNUITY BUSINESS	
1. An Overview.....	541
2. Insured Pension-Benefit Plan Contracts.....	543
a. General characteristics.....	543
b. Types of insured contracts.....	544
3. Life Insurers and the Competition for Management of Pension-Benefit Plan Assets.....	545
a. Post war trends.....	545
b. Explanations of the changing funding pattern.....	548
c. Insurers' view of their position in the competition for management of pension funds.....	553
d. The extent of split-funding.....	555
4. Recent Growth and Change in the Composition and Character of the Group Annuity Business.....	561
a. An overview.....	561
b. Growth and change in types of contracts utilized: 1950-1969...	561
c. Concentration in the group annuity business.....	564
d. Services, costs and asset withdrawal provisions associated with group annuity contracts.....	576
(1) Types of services provided.....	576
(2) Methods of assessing costs.....	576
(3) Transferability of group annuity deposit funds and separate account assets.....	577
5. Changes in Funding Media: The Growth and Use of Separate Account Funding.....	578
6. Growth and Change: New Business and Terminated Business.....	585
a. New business.....	585
b. Terminated business.....	590
c. Net new business: Its contribution to the growth of group annuity business.....	594

**E. EQUITY SEPARATE ACCOUNTS: THEIR DEVELOPMENT, GROWTH,
CHARACTERISTICS AND MANAGEMENT FEES**

	Page
1. The Development of Separate Accounts.....	642
a. The concept and rationale.....	642
b. Characteristics of sampled accounts.....	643
(1) An overview.....	643
(2) Types of contracts funded.....	648
(3) Age, size and intended investment media.....	649
(a) Age distribution of accounts.....	649
(b) Size distribution of accounts.....	654
(c) Intended investment media.....	658
(d) Separate account characteristics and the proportion of account assets held in common stock.....	659
(4) Insurers' investment decision-making responsibility in separate accounts.....	667
c. Investment management fees charged to separate accounts....	670
(1) Investment services provided.....	670
(2) Methods of assessing investment management charges..	671
(3) Magnitude of investment management fees charged...	673

**F. PORTFOLIO MANAGEMENT: INVESTMENT ORGANIZATION, TECHNIQUES,
POLICIES AND RESULTS**

1. Portfolios Managed.....	685
2. Organization for Investment Decision Making.....	685
3. Equity Investment Decisions.....	687
a. Types of equity investments.....	687
b. Statutory investment restrictions.....	687
c. Equity security investment personnel and procedures.....	689
(1) Size of investment staffs.....	689
(2) Educational levels of security analysts.....	690
(3) Assignment of equity security analysts.....	691
(4) Source of information.....	691
(5) Approaches to equity security evaluation.....	692
4. Portfolio Composition.....	692
a. General accounts.....	692
(1) Equity investments.....	695
(2) Equity kickers on debt investments.....	693
b. Separate accounts.....	715
5. Trading in Common Equities.....	732
a. Separate account turnover and activity rates.....	732
b. Separate account investment performance, volatility and turnover.....	741
c. General account turnover and activity rates.....	746
6. Problems of Preferential Treatment in the Management of Various Types of Accounts.....	760
a. The problem.....	760
b. Allocation of securities in a joint acquisition or disposition program.....	760
c. Allocation of new issues among accounts.....	766
d. Concluding comments on treatment of various accounts.....	771

G. SUMMARY AND CONCLUSIONS

1. Coverage and Focus.....	771
2. Development of Individual Equity Based Products.....	772
a. Industry structure and recent developments.....	772
b. Financial integration.....	772
c. Individual equity based products.....	773
3. Life Insurance Companies as Funding Agents for Employee Retirement Benefit Plans: The Group Annuity Business.....	774
a. Life insurers and the competition for management of pension-benefit plan assets.....	774
b. Growth and change in the group annuity business.....	775
c. Changes in funding media: the development and use of separate accounts.....	775
d. New business and terminated business.....	776

	Page
4. Separate Accounts: Development, Growth, Characteristics and Management Fees.....	776
5. Portfolio Management: Investment Organization, Techniques, Policies and Results.....	778
a. Portfolios managed.....	778
b. Organization for investment decision-making.....	778
c. Equity investment decisions.....	778
(1) Statutory investment restrictions.....	778
(2) Equity security investment personnel and procedures....	779
d. Portfolio composition of general accounts.....	779
e. Trading in common equities.....	780
(1) Separate account turnover and activity rates.....	780
(2) Separate account investment performance, volatility and turnover.....	780
(3) General account turnover and activity rates.....	781
f. Conflicts in the treatment of various accounts.....	782
(1) The problem.....	782
(2) Allocation policies and practices.....	782
(3) Concluding comments on preferential treatment problems.....	782

THE PROPERTY-LIABILITY INSURANCE INDUSTRY

H. INTRODUCTION..... 783

I. STRUCTURE OF THE INDUSTRY

1. Concentration, Entry Conditions and Regulation.....	786
a. Forms of legal organization.....	787
(1) Stock companies.....	787
(2) Mutual companies.....	787
(3) Reciprocal insurance exchanges and Lloyds organizations.....	788
(4) Domestic, foreign and alien insurers.....	789
(5) Insurance groups.....	789
b. Lines of property-liability insurance.....	791
c. Regulation.....	793
(1) Entry conditions.....	794
(2) Industry structure: subsidiaries of insurance companies.....	794
(3) Noninsurance holding companies: investments and regulation.....	796
(4) Portfolio investments.....	798
(5) Current and future developments relating to regulation.....	802
2. Property-Liability Insurance Groups and Complexes.....	803
a. Insurance companies affiliated in groups.....	804
(1) Property-liability companies.....	804
(2) Life insurance affiliates.....	807
(3) Other insurance related affiliates.....	807
b. Noninsurance holding companies and noninsurance enterprises.....	809

J. BEHAVIOR AS PORTFOLIO MANAGERS

1. The Investment Organization of Property-Liability Groups.....	810
a. A centralized investment department function.....	810
b. The decision process and degree of autonomy of investment departments.....	811
c. Internal staff of property-liability investment departments.....	814
d. Search for and evaluation of investments.....	816
e. Allocation and trading procedures.....	821
2. Investment Policy and Practice.....	821
a. Investment regulation, company policy and common stock investment.....	822
b. Impact of volume and lines of property-liability insurance written on liquidity and portfolio composition.....	825
c. Underwriting experience and income taxes.....	830
d. Measuring investment performance.....	840
e. Participation in the venture capital market.....	843

	Page
3. Asset Holdings, Liabilities and Surplus of Property-Liability Groups.....	815
a. Consolidation of property-liability group assets, liabilities and surplus.....	845
b. Asset holdings.....	847
c. Common stock investment by exchange listing.....	857
4. Common Stock Turnover and Activity Rates.....	861

K. SUMMARY AND CONCLUSIONS

1. Property-Liability Insurance in the Study.....	863
2. Structure of the Industry and Regulation.....	864
a. Structure.....	864
b. Regulation.....	865
c. Property-liability groups and complexes.....	867
3. Behavior as Portfolio Managers.....	868
a. Organization and procedure in investment departments.....	868
b. Investment policy and practice.....	870

LIST OF TABLES

LIFE INSURANCE INDUSTRY

	Page
VI-1. Concentration of Total Assets, Separate Account Assets and Group Annuity Reserves in Life Insurance Companies as of December 31, 1969	507
VI-2. Affiliates of Stock Companies With Assets of Over One Billion Dollars Classified by Type of Enterprise and Date of Affiliation	514
VI-3. Affiliates of Stock Companies With Assets of Less Than One Billion Dollars Classified by Type of Enterprise and Date of Affiliation	515
VI-4. Affiliates of Mutual Companies With Assets of Over One Billion Dollars Classified by Type of Enterprise and Date of Affiliation	516
VI-5. Affiliates of Mutual Companies With Assets of Less Than One Billion Dollars Classified by Type of Enterprise and Date of Affiliation	517
VI-6. Mutual Funds Managed by Reporting Insurers or Their Affiliates as of December 31, 1969	524
VI-7. Distribution of Funds Affiliated With Life Insurance Companies by Year of Affiliation	525
VI-8. Insurers' Mutual Funds Classified According to Whether They Are Sold Directly to the Public, Function as Investment Media for Separate Accounts or both	526
VI-9. Insurers' Mutual Funds Characterized by Sales Personnel Utilized	527
VI-10. Reserves on Individual Annuity Contracts in Force-Respondent Life Insurance Companies End—1965 and 1969	533
VI-11. Saving Through Various Pension Funds 1946-1969	546
VI-12. Saving Through Insured and Private Noninsured Pension-Benefit Plans	547
VI-13. Estimated Pension Reserve Funded in Separate Accounts End Year, 1964-1969	549
VI-14. Proportion of Major Pension Plans Funded With Respondent Insurers Which Are Split-Funded by Respondent Group as of 12/31/69	558
VI-15. Number of Competing Funding Institutions Managing Split-Funded Plans by Institution Type and by Respondent Group	559
VI-16. Reserves for Pension Benefit Plans Funded With Life Insurance Companies by Type of Contract: Selected Years (End-Year)	562
VI-17. Payments Made Into Insured Pension-Benefit Plans Funded With Life Insurance Companies: by Type of Contract During Selected Years	563
VI-18. Reserves for Pension-Benefit Plans Funded With Life Insurance Companies by Type of Contract Year End: 1965-1969	566
VI-19. Premiums and Considerations Paid by Pension-Benefit Plans Funded With Life Insurance Companies by Type of Contract: Insured Pension Plans Annual Data: 1965-1969	567
VI-20. Amount of Pensions Paid to Beneficiaries of Pension-Benefit Plans Funded With Life Insurance Companies by Type of Contract Annual Payments: 1965-1969	568
VI-21. Reserves and Premiums Paid: Group and Individual H.R. 10 Plans Funded With Life Insurance Companies; Annual 1965-69	569
VI-22. Reserves of Pension-Benefit Plans Funded With Life Insurance Companies Year End 1969	570
VI-23. Considerations Paid by Pension-Benefit Plans Funded With Life Insurance Companies 1969	571
VI-24. Pensions Paid to Beneficiaries of Pension-Benefit Plans Funded With Life Insurance Companies—1969	572
VI-25. Proportion of Group Annuity Contract Reserves Accounted for by Companies in Each Respondent Group (End 1969)	573

VI-26. Proportion of Consideration Payments Made to Insurers on Group Annuity Contracts Accounted for by Each Respondent Group (1969)...	Page 574
VI-27. Proportion of Pension Benefits Paid by Insurers on Group Annuity Contracts by Each Respondent Group (1969).....	575
VI-28. Funding Media Used by Group Annuity Contracts 1965-1969, Respondent Group I.....	596
VI-29. Funding Media Used by Group Annuity Contracts 1965-1969, Respondent Group II.....	597
VI-30. Funding Media Used by Group Annuity Contracts 1965-1969, Respondent Group III.....	598
VI-31. Funding Media Used by Group Annuity Contracts 1965-1969, Respondent Group IV.....	599
VI-32. Funding Media Used by Group Annuity Contracts 1965-1969, All Respondents.....	600
VI-33. Separate Accounts as Funding Media for Group Annuity Contracts 1965-1969, Respondent Group I.....	691
VI-34. Separate Accounts as Funding Media for Group Annuity Contracts 1965-1969, Respondent Group II.....	602
VI-35. Separate Accounts as Funding Media for Group Annuity Contracts 1965-1969, Respondent Group III.....	603
VI-36. Separate Accounts as Funding Media for Group Annuity Contracts 1965-1969, Respondent Group IV.....	604
VI-37. Separate Accounts as Funding Media for Group Annuity Contracts 1965-1969, All Respondents.....	605
VI-38. Life Insurance General Accounts as Funding Media for Group Annuity Contracts 1965-1969, Respondent Group I.....	606
VI-39. Life Insurance General Accounts as Funding Media for Group Annuity Contracts 1965-1969 Respondent Group II.....	607
VI-40. Life Insurance General Accounts as Funding Media for Group Annuity Contracts 1965-1969 Respondent Group III.....	608
VI-41. Life Insurance General Accounts as Funding Media for Group Annuity Contracts 1965-1969 Respondent Group IV.....	609
VI-42. Life Insurance General Accounts as Funding Media for Group Annuity Contracts 1965-1969 All Respondents.....	610
VI-43. Number of Contracts Outstanding With Variable Benefits as of December 31, 1969 by Respondent Group.....	611
VI-44. Number of Companies Reporting Group Variable Benefit Annuity Contracts in Force as of December 31, 1969 by Respondent Group.....	612
VI-45. Group Variable Annuity Contract Benefits Offered by Respondent Companies: Year in Which Contract Initially Offered.....	613
VI-46. Group Annuity Agreements Newly Issued During 1968-1969 by Respondent Group I.....	614
VI-47. Group Annuity Agreements Newly Issued During 1968-1969 by Respondent Group II.....	616
VI-48. Group Annuity Agreements Newly Issued During 1968-1969 by Respondent Group III.....	618
VI-49. Group Annuity Agreements Newly Issued During 1969-1968 by Respondent Group IV.....	620
VI-50. Group Annuity Agreements Newly Issued During 1968-1969 by All Respondents.....	622
VI-51. Percentage of New Cases by Number and by Contributions Which Use Insurers' Actuarial Services.....	624
VI-52. Terminations in Group Annuity Business 1968-1969 by Respondent Group I.....	625
VI-53. Terminations in Group Annuity Business 1968-1969 by Respondent Group II.....	627
VI-54. Terminations in Group Annuity Business 1968-1969 by Respondent Group III.....	629
VI-55. Terminations in Group Annuity Business 1968-1969 by Respondent Group IV.....	631
VI-56. Terminations in Group Annuity Business 1968-1969 by All Respondents.....	632
VI-57. Group Annuity Business: Newly Issued and Terminated 1968-1969.....	634

	Page
VI-58. Percentage of Lost Contributions Attributable to the Removal of Assets or Contributions to Other Funding Agents.....	635
VI-59. Summary of New Net Group Annuity Business by Source of New Business and Reasons for Loss of Business 1968-1969: All Respondents...	636
VI-60. Summary of Net New Group Annuity Business by Source of New Business and Reasons for Loss of Business 1968-1969: Group I Respondents.....	637
VI-61. Summary of Net New Group Annuity Business by Source of New Business and Reasons for Loss of Business 1968-1969: Respondent Groups II, III, IV.....	638
VI-62. Services Provided by Respondent Insurers to Newly Acquired Group Annuity Cases and to Terminated or Reduced Cases 1968-1969: All Respondents.....	639
VI-63. Services Provided by Respondent Insurers to Newly Acquired Group Annuity Cases and to Terminated or Reduced Cases 1968-1969: Group I Respondents.....	640
VI-64. Services Provided by Respondent Insurers to Newly Acquired Group Annuity Cases and to Terminated or Reduced Cases 1968-1969: Respondent Groups II, III, and IV.....	641
VI-65. Assets and Common Stock Holdings of Reporting Separate Accounts by Type of Account as of December 31, 1969.....	645
VI-66. Types of Contracts Funded in Separate Accounts as of December 31, 1969 Assets by Account Category.....	647
VI-67. Total Assets and Common Stock Holdings at Year End 1969 for Separate Accounts Classified by Age of Account Account Type: Registered.....	650
VI-68. Total Assets and Common Stock Holdings at Year End 1969 for Separate Accounts Classified by Age of Account, Account Type: Nonregistered Commingled.....	651
VI-69. Total Assets and Common Stock Holdings at Year End 1969 for Separate Accounts Classified by Age of Account Account Type: Single Client.....	652
VI-70. Proportion of All Reporting Separate Accounts and Separate Account Assets Represented by Accounts Established During 1968-1969.....	653
VI-71. Number, Assets and Common Stock Holdings of Separate Accounts Classified by Size of Account: Registered Accounts.....	655
VI-72. Number, Assets and Common Stock Holdings of Separate Accounts Classified by Size of Account: Nonregistered Commingled Accounts...	656
VI-73. Number, Assets and Common Stock Holdings of Separate Accounts Classified by Size of Account: Single Client Accounts.....	657
VI-74. Separate Accounts Classified by Primary Intended Investment Media and by Actual Investments: Registered Accounts.....	661
VI-75. Separate Accounts Classified by Primary Intended Investment Media and by Actual Investments: Nonregistered Commingled Accounts.....	662
VI-76. Separate Accounts Classified by Primary Intended Investment Media and by Actual Investment: Single Client Accounts.....	663
VI-77. Age and Size Distributions of the Debt and Debt-Equity Mix Separate Accounts.....	664
VI-78. Ratios of Common Stock Holdings to Total Assets for Separate Accounts Classified by Type and Primary Intended Investment Media.....	665
VI-79. Multiple Regression Statistics from the Analysis of the Proportion of Separate Account Assets Invested in Common Stock.....	666
VI-80. Average Fee Ratios by Size of Contractholder's Interest: Unregistered Accounts 1969 Schedules.....	679
VI-81. Fee Ratios for Registered Accounts Classified By Account Size 1966-1969.....	680
VI-82. Fee Ratios for Nonregistered Commingled Accounts by Size Categories 1966-1969.....	681
VI-83. Fee Ratios for Single Client Accounts Classified by Size of Account 1966-1969.....	682
VI-84. Fee Ratios by Type of Account: 1966-1969 Results Combined.....	683
VI-85. Regression Coefficients and 't' Values for Regressions With Investment Management Fee Ratio as Dependent Variable.....	684
VI-86. Investment Department Personnel in Various Capacities—Group I Companies.....	701

	Page
VI-87. Investment Department Personnel in Various Capacities—Group II Companies.....	702
VI-88. Investment Department Personnel in Various Capacities—Group III Companies.....	703
VI-89. Investment Department Personnel in Various Capacities—Group IV Companies.....	704
VI-90. Composition of Life Insurance Company General Account Assets (Year-End 1964 and 1969).....	705
VI-91. Asset Holdings—End-1969: General Accounts.....	706
VI-92. General Accounts Asset Composition—End-1969: Government Securities and Short-Term Nongovernment Debt.....	707
VI-93. General Accounts Asset Composition—End-1969: Nongovernment Long-Term Debt Securities.....	708
VI-94. General Accounts Asset Composition—End-1969: Common Stock and Warrants.....	709
VI-95. General Accounts Asset Composition—End-1969: Mortgage Loans and Real Estate Owned.....	710
VI-96. General Accounts Asset Composition—End-1969: Preferred Stock and Other Assets.....	711
VI-97. Holdings of Common Stock by Exchange Listing: Life Insurance General Accounts—End-1969.....	712
VI-98. Holdings of Common Stock by Exchange Listing: Life Insurance General Accounts—End-1964.....	713
VI-99. New Commitments Made During 1969 With Equity Kickers.....	714
VI-100. Asset Composition of Separate Accounts in U.S. Insurers, December 31, 1969.....	716
VI-101. Asset Composition of Separate Accounts Primarily Intended for Common Stock December 31, 1969.....	721
VI-102. Asset Composition of Separate Accounts Not Primarily Intended for Common Stock December 31, 1969.....	723
VI-103. Holdings of Government Securities and Private Short-Term debt Obligations by Separate Accounts Intended Primarily for Common Stock December 31, 1969.....	724
VI-104. Holdings of Government Securities and Private Short-Term Debt Issues by Separate Accounts Not Intended Primarily for Common Stock December 31, 1969.....	725
VI-105. Mortgage Loans Held in Separate Accounts December 31, 1969.....	726
VI-106. Holdings of Common Equities of Separate Accounts Primarily Intended for Common Stock December 31, 1969.....	727
VI-107. Holdings of Common Equities of Separate Accounts Not Primarily Intended for Common Stock December 31, 1969.....	728
VI-108. Holdings of Common Stock by Exchange Listing Separate Accounts Primarily Intended for Common Stock—End 1969.....	729
VI-109. Holdings of Common Stock by Exchange Listing Separate Accounts Not Primarily Intended for Common Stock—End 1969.....	730
VI-110. Regression Statistics for Analysis of the Proportion of Common Stocks Held in Non-NYSE Shares.....	731
VI-111. Separate Account Turnover and Activity Rates Classified by Account Type and Year Measured.....	736
VI-112. Separate Account Turnover and Activity Rates by Year Measured and Account Size.....	737
VI-113. Separate Account Turnover and Activity Rates by Year Measured and Year Account Established.....	738
VI-114. Regression Statistics for Separate Account Turnover Analysis.....	739
VI-115. Regression Statistics for 1969 Turnover Data Separate Accounts.....	740
VI-116. Summary of Investment Return Data for the Separate Accounts Classified by Volatility.....	744
VI-117. Regression Coefficients and 't' Values for Describing the Relationship Between Performance and Turnover and Other Account Characteristics.....	745
VI-118. Life Insurance General Accounts Common Equities Turnover Rates 1965.....	748
VI-119. Life Insurance General Accounts Common Equities Activity Rates 1965.....	749
VI-120. Life Insurance General Accounts Common Equities Turnover Rates 1966.....	750

	Page
VI-121. Life Insurance General Accounts Common Equities Activity Rates 1966.....	751
VI-122. Life Insurance General Accounts Common Equities Turnover Rates 1967.....	752
VI-123. Life Insurance General Accounts Common Equities Activity Rates 1967.....	753
VI-124. Life Insurance General Accounts Common Equities Turnover Rates 1968.....	754
VI-125. Life Insurance General Accounts Common Equities Activity Rates 1968.....	755
VI-126. Life Insurance General Accounts Common Equities Turnover Rates 1969.....	756
VI-127. Life Insurance General Accounts Common Equities Activity Rates 1969.....	757
VI-128. Turnover and Activity Rates for General Accounts and Separate Accounts Combined Annually: 1965-1969.....	758
VI-129. Regression Statistics for 1969 General Account Turnover Analysis.....	759
VI-130. Price Discrimination Analysis: Summary Statistics for All Companies.....	765
VI-131. Purchases of New Issues at Offering by Life Insurance Companies.....	769
VI-132. Allocation of New Issues by Account Type.....	770

PROPERTY-LIABILITY INSURANCE INDUSTRY

VI-133. Property-Liability Insurance Groups in order of 1969 P-L Net Premiums Written.....	790
VI-134. New York Capital and Surplus Requirements.....	799
VI-135. Number of Property-Liability Insurance Companies in 25 Large P-L Insurance Groups.....	806
VI-136. Activities of Insurance Company Complexes: Affiliated Financial Enterprises of 25 P-L Groups, December 31, 1969.....	808
VI-137. Investment Department Personnel in various Capacities.....	815
VI-138. Investment Department Personnel and Highest Level Completed of C.F.A. Examinations.....	817
VI-139. Importance of Selected External Sources of Investment Information.....	818
VI-140. Importance of Various Approaches to Securities Evaluation.....	820
VI-141. States Whose Regulatory Statutes are Most Restrictive in Terms of Amount of Common Stock Held by P-L Insurers.....	824
VI-142. Aggregate Net Premiums Written in 1969 by Categories of Insurance Lines for 25 P-L Groups.....	827
VI-143. Statutory Net Underwriting Gain (Loss) and Dividends to policyholders, 1965-1969.....	834
VI-144. Net Investment Income Earned and Net Realized Capital Gain (Loss), 1965-1969.....	835
VI-145. Statutory Underwriting Results After Dividends to Policyholders and Net Investment Income and Realized Gain, 1965-1969.....	836
VI-146. Net Unrealized Capital Gain (Loss).....	838
VI-147. Consolidated Holdings of Restricted Securities by 25 P-L Groups, December 31, 1969.....	843
VI-148. Asset Holdings of P-L Groups, December 31, 1969.....	848
VI-149. Liabilities and Surplus, December 31, 1969.....	849
VI-150. Assets Holdings—1969, Property & Liability Insurance Groups—Summary of Major Categories of Assets and Total Assets.....	850
VI-151. Asset Holdings—1969, Property & Liability Insurance Groups—Cash and Near Cash Items.....	851
VI-152. Asset Holdings—1969, Property & Liability Insurance Groups—U.S. Government, State, Local and Foreign Government Issues.....	852
VI-153. Asset Holdings—1969, Property & Liability Insurance Groups—Nongovernment Long-Term Debt Issues.....	853
VI-154. Asset Holdings—1969, Property & Liability Insurance Groups—Common Stock, Warrants, Rights & Options.....	854
VI-155. Asset Holdings—1969, Property & Liability Insurance Groups—Mortgage Loans and Real Estate Owned.....	855

VI-156. Asset Holdings—1969, Property & Liability Insurance Groups Preferred Stock and All Other Assets.....	Page 856
VI-157. Common Stock Holdings by Exchange Listings 25 P-L Groups ..	858
VI-158. Common Stock Holdings by Exchange Listings 5 Mutual P-L Groups.....	859
VI-159. Common Stock Holdings by Exchange Listings 20 Stock P-L Groups.....	860
VI-160. P-L Insurance Group Consolidated Common Equities Turnover and Activity Rates, 1965-1969	862
VI-161. P-L Insurance Groups in Study Sample.....	875
VI-162. P-L Insurance Sample Compared With Industry Data.....	877

APPENDICES

A. Sampling Procedures for Life Insurance Company Questionnaires Form I-50, I-51 and I-52.....	872
B. Property-Liability Insurance Sample Selection, Research Design and Questionnaires.....	874

CHAPTER VI

INSURANCE COMPANIES

THE LIFE INSURANCE INDUSTRY

A. COVERAGE AND FOCUS

This study of life insurance companies focuses upon the competitive pressures and opportunities which appear to be producing a greater emphasis upon investment management in the industry. In particular this chapter examines the reasons behind life insurers' increasing interest in equity investments, the nature of these investments and the sources of the increased trading activity in equity securities. Life insurance companies are important to the Study because of the large amount of assets under their management and because they have the potential for substantially increasing the proportion of these assets held in equity securities.

Historically life insurers have been distinguished from investment advisory firms and bank trust departments, which are examined in the two immediately preceding chapters, in that (1) advisory firms and trust departments offer investment management as a principal service, whereas the investment element of life insurance evolved incidentally to the level premium method of payment, and (2) although advisory firms and trust departments are explicitly in the business of managing other peoples' assets, the assets managed by life insurers have been considered by the state insurance statutes and state regulatory bodies to be the insurers' own. Recently, however, life companies have evidenced greater concern with regard to the growth of these assets, and have developed new products and modified established products in response to this concern. As a result of these changes, investment features are more prominent and insurers have created special investment accounts to serve these products. In addition, some life companies have entered the mutual fund business, have created additional investment affiliates in such forms as real estate investment trusts and venture capital firms and have rapidly expanded into other financial businesses including, in a few cases, the offering of investment advisory services. These developments are bringing insurers into closer competition with bank trust departments and investment advisory firms.

This chapter analyzes the evolution of life insurers as investment managers in four parts. First, changes in the structure of the industry and in lines of business are analyzed with emphasis upon the expansion of insurers' activities through affiliates and the development of equity based products designed for sale to individuals. Second, the responses of life companies to a deteriorating position in the competition for management of pension and profit-sharing plan assets is documented. Among these responses were the creation of special "separate"

investment accounts tailored to serve, in particular, the equity investment objectives of retirement plans. The development, growth and characteristics of these separate accounts (some of which serve individual variable annuities) are analyzed in the third major section of this study. Finally, the analysis concludes with an examination of the investment organization of life insurers and their management practices, including trends in portfolio composition, fees charged, and trading activity.

This analysis draws upon published sources, discussions with insurance company executives and data bases from other parts of the Study. However, primary reliance is placed upon responses obtained from three sets of questionnaires sent to life insurance companies; namely, Form I-50 which dealt with separate accounts, Form I-51 concerning the group annuity business and Form I-52 which collected information on affiliations, individual equity based products and investment organization, policies and practices. The sampled companies hold over 90 percent of all existing separate account assets and group annuity reserves. Form I-52 was sent to a judgment sample of medium-sized and small insurers as well as to the largest companies. The sampling procedure used in selecting each of the three sets of respondents is described in appendix A to this chapter.

Table VI-1

Concentration of Total Assets, Separate Account Assets
and Group Annuity Reserves in Life Insurance Companies
as of December 31, 1969

Size Measure	Number of Insurers Accounting for Specified Accumulated Percentages of All Assets or Reserves				
	10%	25%	50%	75%	83%
1. Total Assets	1	2	7	27	48
2. Separate Account Assets	1	1	3	7	11
3. Group Annuity Reserves	1	2	3	6	8

Note: Group annuity reserves are limited to group deferred annuity and deposit administration (including immediate participation guarantee) contracts.

Sources: All industry totals are from the Institute of Life Insurance. Company total assets are from Fortune, May 1970. Company separate account assets are from Study Questionnaire Form I-50 and company group annuity reserves from Study Questionnaire Form I-51.

B. STRUCTURE OF THE INDUSTRY

1. Size, Concentration and Entry Conditions

At the end of 1969 there were over 1,800 legal reserve life insurance companies operating in the United States with total assets of \$197 billion.¹ In addition, Canadian life insurers, several of whom are included in the Study samples of life companies, held \$15.8 billion. By number, over 91 percent of U.S. life insurers are organized as stock companies. However, the 156 mutual companies account for better than two-thirds of the industry assets.²

The insurance industry is relatively highly concentrated; a smaller number of firms account for a higher proportion of industry resources than is true for bank trust departments or the investment advisory industry.³ The degree of concentration among life companies is summarized in Table VI-1.⁴ This Table shows the number of companies which account for specified percentages of industry total assets, separate account assets and group annuity reserves. As indicated above, the Study's analysis of life insurers focuses particularly upon the competitive pressure for equity funding of group annuity contracts through the use of separate accounts. The Table indicates, for example, that 50 percent of industry assets are held by only seven insurers. Separate account assets and group annuity reserves are even more concentrated.⁵

There are 28 U.S. companies with total assets in excess of one billion dollars. Eighteen of these are mutual companies having combined assets of \$122 billion; ten are stock companies with \$27 billion. From the end of 1949 to the middle of 1969, 2,190 companies commenced legal reserve life insurance business.⁶ Most of these were newly formed companies.⁷ During the same period, 989 companies terminated operation, mostly through merger. Thus there was a net increase of 1,201 companies during the period.⁸ Although many of these new companies specialize in a narrow spectrum of insurance products and are confined geographically, new entry has been slowly eroding the high degree of concentration found in the industry. For example, in 1945 insurers founded during the previous 20 years account for just four percent of life insurance in force; by 1968 this group of insurers had ten percent of the total⁹ while companies established after 1945 accounted for 13 percent.¹⁰

Entry conditions established by the state regulators vary widely. Most new enterprises find organization as a stock corporation the most

¹ This figure does not include any assets of mutual funds affiliated with these insurers. It does include assets of insurance company separate accounts. Common stock holdings are valued at market value but most other assets are valued on an amortized cost basis.

² There were 156 mutuals out of 1,812 life companies operating as of June 30, 1969, according to the Institute of Life Insurance, *Tally of Life Insurance Statistics*. The proportion of the industry assets held by stock companies has been steadily growing, at least since World War II.

³ Concentration statistics are reported in ch. IV for investment advisory firms and in ch. V for trust departments.

⁴ Concentration among property and liability companies is reported in sec. I.1.

⁵ Group business in both the annuity and insurance lines is substantially more concentrated than is the individual annuity and insurance business.

⁶ *Institute of Life Insurance 1970 Factbook*, 106. ("*ILI, 1970 Factbook*").

⁷ However, this number also includes additions resulting from changes of existing companies from fraternal, assessment or nonlife status to legal reserve life operations, consolidations of two or more existing companies and dormant companies which were reactivated.

⁸ Competition has also been generated by the creation of "captive companies" founded solely for the purpose of handling the insurance problems of the sponsoring corporation.

⁹ Even though mergers and consolidations reduced this group from 220 companies in 1945 to 173 in 1968.

¹⁰ *ILI, 1970 Factbook* 108.

feasible or desirable means of entry. To become licensed in New York State, which is generally known for its restrictive insurance law and strict regulation, a stock corporation must have paid-in capital of at least \$1 million and paid-in initial surplus equal to the greater of \$2 million or 200 percent of its capital, and must at all times maintain a minimum capital of \$1 million.¹¹ The duration of its corporate existence shall be not less than 30 years.¹² The Superintendent has authority to refuse a license to any corporation, "if he finds, after notice and hearing, that any of the proposed incorporators or directors of a stock corporation, or that any of the directors of a mutual corporation, has been convicted of any crime involving fraud, dishonesty, or like moral turpitude, or is an untrustworthy person."¹³ Some other states are quite liberal respecting establishment of new insurers. This is reflected in the fact that 42 percent of life companies operating in mid-1969 were incorporated in just four states—Arizona, Illinois, Louisiana and Texas. Arizona alone accounted for 61 of the 105 new operations established in the 12 months commencing July 1, 1968.¹⁴

2. Trends in Traditional Lines of Business and in Asset Growth

Life companies have traditionally sold a variety of insurance and annuity contracts including various types of whole life and endowment policies, many varieties of term policies and combination term and permanent life insurance contracts, industrial insurance, group insurance, individual annuity policies and a wide range of group annuity contracts, group credit insurance and accident and health insurance.¹⁵ Not all these contracts contribute significantly to the growth of insurance company assets, however. In fact, the fastest growing portions of the life insurance business during the past two decades have been group term insurance and family combination policies in which term features are dominant.¹⁶ These are forms of insurance in which relatively little in the way of reserves are built up and little or no cash values are accumulated. As a result of the rapid growth of term relative to cash value insurance, the average premium received by insurers per \$1,000 of life insurance in force has declined from \$27.00 in 1950 to \$15.50 in 1969.¹⁷ One consequence of this trend has been a dilution in the contribution of life insurance policies to the asset growth of life companies.

Aside from permanent cash value life insurance the most significant contributor to the industry's asset growth is the insured pension plan business. Since, as indicated in Table VI-1 above, this business is highly concentrated, it has been particularly significant to the asset growth of the largest companies. Reserves of group deferred annuity and deposit administration contracts, which represent the principal portion of the group annuity business, grew from \$4.4 billion (1950) to \$31.1 billion (1969) over the past two decades, a sevenfold increase which compares with a threefold growth of total industry assets.¹⁸ In

¹¹ N.Y. Ins. Law § 191 (McKinney Supp. 1969). This entrance requirement was increased in 1962 and again in 1966 to the level described in the text.

¹² *Id.* § 48(5)(h).

¹³ *Id.* § 48(8)(c).

¹⁴ Institute of Life Insurance, *Tally*, November 1969.

¹⁵ Relatively few companies have sold all of these products.

¹⁶ Growth is measured in terms of amounts in force. See the *ILI 1970 Factbook* 26-34.

¹⁷ *Id.* at 59.

¹⁸ From \$64.0 billion in 1950 to \$197.2 billion in 1969.

spite of this substantial growth in life insurance group annuity reserves, the dollar volume of insured pension plans grew at a significantly lower rate than noninsured plans over these twenty years.¹⁹

Both the change in the mix of cash value versus noncash value insurance policies and the growth of pension plan assets have significantly affected the growth of life insurance industry assets over the past quarter century. A number of other factors may affect both the composition of life insurance sales and total sales. These include demographic factors which affect personal saving, the number and proportion of households in age groups which are significant insurance purchasers, changes in the urban-rural distribution of households, the growth rate of disposable income, the age distribution of insurance contracts and of policyholders, investment return, the ability of insurers to accumulate surplus and contingency reserves and the rate of increase in the general price level. For whatever combination of reasons, the growth rate of life insurer assets has declined somewhat during the post World War II generation. Total assets grew at a rate of about 7 percent per annum through the first post-war decade (1945-54), 6 percent per annum during the second decade (1955-64), and averaged 5.7 percent per annum during the half-decade, 1965-69.²⁰ From an insurer's perspective these growth rates are very modest compared to the growth achieved during the same period by savings depositories, mutual funds and noninsured pension plans,²¹ which are regarded as major competitors for the savings of households. Whether in response to this growth record or simply in recognition of the opportunities available, life companies have developed a much keener interest in asset growth and have begun placing more emphasis upon the accumulation and management of assets.

In addition, life insurers have become concerned about the entry and threat of entry of existing financial and nonfinancial enterprises into the insurance business. This competition comes from industrial corporations acquiring life companies doing a general insurance business as well as creating "captive" insurers (that is, intended solely to handle insurance for the sponsoring company), from conglomerate firm acquisition of insurers and from the entry of mutual funds, investment advisory complexes and brokerage firms into the insurance business. The nonfinancial corporation entry in particular poses a threat to existing insurers of the loss of large group insurance and annuity contracts.²²

In recent years, therefore, life companies have sensed that the environment in which they live has become more intensely competitive due to (1) the aggressive competition of bank trust departments, and recently, investment advisory complexes, for management of pension plan assets; (2) mutual funds encouraging individuals to save through

¹⁹ For an analysis of the reasons for this development, see sec. D.

²⁰ Since most life insurance assets are valued on a cost or amortized cost basis, growth of stated assets is little affected by changes in market values. Only the common stock portion which varied from 1% to 5.3% of assets during the quarter century under consideration is valued at market.

²¹ See ch. III, C.2.

²² See Donald S. MacNaughton, "Noninsurance Company Acquisitions in Life Insurance," *Insurance*, November 23, 1968. This article presented to a conference on conglomerates sponsored by CNA, outlines the potential threat to existing insurers from all the sources listed above. At the time, Mr. MacNaughton was Senior Executive Vice President of Prudential; he has since become Chairman of the Board.

mutual fund shares rather than cash value insurance; (3) financial institutions developing full financial service packages, including insurance; and (4) industrial and conglomerate corporations invading the insurance business. Insurers have responded to these pressures by (1) developing equity funding arrangements and modern flexible contracts for pension plans, (2) offering group and individual variable annuity products, (3) entering the mutual fund business, (4) preparing the way for variable life insurance, (5) further expanding their activities through subsidiaries and via the creation of holding companies, and (6) building up their investment skills, concentrating more effort on the management of invested assets, and in particular, increasing their activity in various types of equity investments.

In the next section the trend to integration of financial services through subsidiaries and holding companies and, in particular, insurer development of equity based products is described. This will be followed by an analysis of (1) the changing environment in the competition for pension plan assets (section D), (2) the development and the uses of separate accounts (section E) and (3) investment policies and the management of general account and separate account assets (section F).

C. FINANCIAL INTEGRATION AND THE DEVELOPMENT OF EQUITY PRODUCTS

1. Financial Integration Through Subsidiaries and Holding Companies

In the late 1960's, insurance companies seemed suddenly to be widening their horizons and engaging in a broad assortment of non-insurance activities. Subsidiaries were being founded or acquired. Holding companies were established which in turn quickly began creating and acquiring a variety of enterprises. In most instances these new activities bore some reasonable relation to the insurance business; for example, they added complementary financial services to traditional insurance products or they utilized overhead in the form of sales forces, data-processing equipment, investment management skills, and other skills which were built up to serve insurance needs. In certain instances, however, particularly in the case of some stock insurance companies which created upstream holding companies,²³ any potentially profitable activity appeared to be worth consideration. Among other activities, affiliates of life insurers can be found engaging in the operation of banks, trust companies, investment advisory firms, savings and loan associations, finance companies, nursing homes, hotels and motels, schools, airlines, real estate development and management firms, real estate investment trusts, venture capital enterprises, motion picture companies, broadcasting firms and various manufacturing enterprises.

When an insurer's interests dictate expansion of activities for the purpose of more fully utilizing existing resources in areas clearly

²³ The insurer creates a holding company and the insurer's stockholders exchange their stock holdings for holding company stock. The holding company is then the sole stockholder of the insurer.

ancillary to the insurance business it is likely to be able to achieve this objective through the acquisition or creation of subsidiary companies.²⁴ If, however, a stock company is interested in making full use of its existing capital and in obtaining greater financial leverage through issuance of a full range of debt and equity instruments, and it wishes to diversify widely and to be in a position to take advantage of almost any sort of potentially profitable opportunity, then the creation of an upstream holding company will be necessary. In addition, the holding company route offers tax advantages for profitable life insurers who control property and liability companies with net losses; a holding company may include in its balance sheet assets which are nonadmitted assets to insurers in their statutory financial statements and holding companies make possible a more flexible and aggressive acquisition program through the issuance of stock as an alternative to cash payments. Diversification also provides a means of warding off takeover threats and holding companies have proved to be effective means of avoiding state insurance statutory and regulatory restrictions.²⁵ Many stock companies, including the largest (e.g., Connecticut General, Travelers, Aetna, Lincoln National, Continental Assurance, Occidental and National Life and Accident) are wholly owned by holding companies.²⁶

In order to obtain a reasonably broad view of the mix of activities in which insurance complexes have become engaged in recent years, the Study asked insurers responding to questionnaire Form I-52 to supply the following information: (1) the name of the company (if any) controlling the insurance complex *and each controlled enterprise*, excepting separate accounts, mutual funds and companies serving exclusively as investment advisers to mutual funds; ²⁷ (2) the date each such company entered (for example, was established or acquired) the complex and (3) the primary business of each reported enterprise.²⁸ The questionnaire was mailed to 55 U.S. life insurers and 11 Canadian life companies. Responses to the affiliated company portion of the questionnaire were received from all the U.S. companies and six of the Canadian companies.²⁹

These affiliations are summarized in four tables (Table VI-2 to VI-5) as of December 31, 1969. Respondents are grouped according

²⁴ However, in some states, notably New York prior to the passage in 1969 of the Insurance Holding Company Act, life insurers have been severely restricted in the types of subsidiaries they can control.

²⁵ See the Report of the Industry Advisory Committee to the Subcommittee of the National Association of Insurance Commissioners on Holding Company Legislation, Part I.

²⁶ A compilation of information on 103 stock companies published in October 1968 reported 29 which were part of holding company complexes (Financial Research Associates, Life Insurance Stock Letter, Supplement, October 1968). Property and liability companies have been, if anything, more aggressive in adopting the holding company form of organization. Taking all types of insurers together, Barron's reported in early 1970 that "every underwriter listed on the New York Stock Exchange has become a holding company, while nearly 60 of the 140-odd independent insurance firms carried in Barron's stock listings have taken the same route." Barron's, January 12, 1970, at 5.

²⁷ Mutual fund affiliations are discussed below.

²⁸ To assist in this description, a list of categories of enterprises was attached and respondents were requested to identify each company's principal line of business by reference to this list wherever any item on the list reasonably characterized the firm's operations.

²⁹ Responses from Canadian domiciled companies were, of course, voluntary. The sample is described in app. A. It does include the 22 largest U.S. insurers and the four largest Canadian insurers measured by holdings of common stock of U.S. issuers. Excluded from the count of companies in Tables VI-2 to VI-5 are Teachers Insurance and Annuity Association ("TIAA") and College Retirement Equities Fund ("CREF"), which were included in the sample, although these companion enterprises are not organized as legal reserve life insurers.

to their size and mode of organization (that is, stock or mutual). This summary limits affiliations to those which were proximately initiated by respondent insurers, and thereby excludes affiliations from several large conglomerates and from complexes in which the respondent insurer is not itself a leading firm.³⁰ Thus, the affiliations reported in Tables VI-2 to VI-5 are to be interpreted only as a description of the pattern of expansion life companies have created through their direct action; they substantially understate all life company affiliations resulting from the creation or acquisition of life insurers by industrial firms and financial and nonfinancial conglomerate corporations.

The affiliations shown in Tables VI-2 to VI-5 reflect the limitations mutual companies face in attempting to expand or diversify, as well as less interest on the part of some mutuals in expansion.³¹ There are a total of 316 affiliated enterprises reported by the 28 stock companies, as compared to 93 by the 32 mutuals. The Tables also dramatically indicate how recently most of these affiliations have been consummated. Of the 409 affiliates shown, 276 (68 percent) joined the complex in 1968 or 1969. More significantly, of the 307 noninsurance³² affiliations reported, 235 (77 percent) were effected during 1968-69.³³

³⁰ Among the excluded enterprises are affiliates of AVCO (which controls Paul Revere Life Insurance Company), Investors Diversified Services (which controls Investors Syndicate Life Insurance Company), Transamerica Corporation (controller of Occidental Life) and Continental Corporation (owner of Franklin Life). The last named complex is included in the summary of property and liability affiliates below (sec. I.2.a). Another four insurance complexes which would normally have qualified for the sample for this questionnaire (American General, Insurance Company of North America, Nationwide Mutual and Fireman's Fund) were excluded because they were included in the property and liability sample. (American General itself is included as an affiliate of California-Western States Life Insurance Company, but other affiliates of American General do not appear in the compilation reported here.) On the other hand, four of the largest stock insurers—Connecticut General, Travelers, Aetna and Continental Assurance—are included both here and in the analysis of property and liability groups below.

³¹ A mutual organization is unable, of course, to create an upstream holding company. Affiliations among mutuals are possible and such affiliations are reflected in the tables. Also, downstream holding companies have been created by mutual companies, but downstream activities normally come under full scrutiny of the state insurance departments. Apparently some mutual companies have considered transformation into stock corporations. The American Management Association found it worthwhile to repeat in June 1970, a successful 1969 seminar on "How to Stock or Diversify a Mutual." The same organization provided a special briefing session in May 1970 for insurance executives on "Holding Companies, Mergers and Acquisitions in the Insurance Industry," based on the premise that "There's a limited future for the single-service company," and consequently "to survive" insurers "must plan now for becoming the 'total financial service' company of tomorrow."

³² Defined to exclude life insurance, property and liability insurance, credit life insurance and accident and health insurance companies.

³³ The proportion is 84 percent if 1967 is included.

Table VI-2

Affiliates of Stock Companies With Assets of Over One Billion Dollars
Classified by Type of Enterprise and Date of Affiliation

Enterprise Type	Number of Affiliates Entering a Complex							Total 1965	Totals
	1959	1962	1967	1966	1965	1980- 1964	1955- 1959		
Life Insurance Company	4	2	2		1	7	1	3	20
Property and Liability Insurance Company	5	5	1	4	1	9	2	6	33
Variable Annuity Company		1	1						2
Investment Advisory Firm (Securities)	2	4	2						8
Mortgage and Title Company	8								8
Insurance Agency	3			2					5
Real Estate Management or Advisory Firm	8	5		2	1				16
Real Estate Investment Trust or Redevelopment Firm	7	6	1	0					14
General Life Insurance	1								1
Accident and Health Insurance Company	1								1
Marriage Broker									0
Finance Company	2	1			1	2			6
Mortgage Lending Company	1								1
Securities Broker or Dealer	4	3	1						8
Small Business Investment Company	1								1
Venture Capital Firm		1						1	2
Commercial Bank									0
Thrift Institution (Savings and Loan Association, Credit Union, etc.)									0
Low-income Housing Firm									0
Leasing Firm	4								4
Processing or Warehousing Firm									0
Hedge Fund Management Company									0
Other Financial Service Firm	1								1
Broadcasting			1					1	2
Computer and Other Data Processing	5					2			7
Mining Company		3	3		1			1	8
Other Nonfinancial Enterprise	7	2	2	4				1	16
TOTALS	64	33	14	12	5	20	3	13	164

Note: Number of Stock Companies included is 10.

Source: Responses to Study Questionnaire Form I-52, Part A.

Table VI.3

Affiliates of Stock Companies With Assets of Less Than One Billion Dollars
Classified by Type of Enterprise and Date of Affiliation

Enterprise Type	Number of Affiliates Entering a Complex								Totals
	1969	1968	1967	1966	1965	1960-1964	1955-1959	Pre-1955	
Life Insurance Company	6	7	4			1		2	20
Property and Liability Insurance Company			3		1	2		2	8
Variable Annuity Company				1					1
Investment Advisory Firm (Securities)	1	1							2
Mortgage and Title Company	1	11				1			13
Insurance Agency	4	2	3	1	2				12
Real Estate Management or Advisory Firm	5							1	6
Real Estate Investment Trust or Redevelopment Firm	4	4				1		4	13
Credit Life Insurance	1		1						2
Accident and Health Insurance Company								1	1
Mortgage Broker									0
Finance Company					1			1	2
Mortgage Banking Company		1							1
Securities Broker or Dealer	1	6				1	1	1	10
Small Business Investment Company		1							1
Venture Capital Firm	4	1							5
Commercial Bank		1							1
Thrift Institution (Savings and Loan Association, Credit Union, etc.)		1							1
Investment Banking Firm									0
Leasing Firm									0
Factoring or Warehousing Firm									0
Hedge Fund Management Company									0
Other Financial Service Firm	16	4	2		1			2	25
Broadcasting	1	3							4
Computer and Other Data Processing	1	1			1				3
Holding Company	1	3						1	5
Other Nonfinancial Enterprise	2	3	3	1				7	16
TOTALS	48	50	16	3	6	6	1	22	152

Note: Number of Stock Companies included is 18.

Source: Responses to Study Questionnaire Form I-52, Part A.

Table VI-4

Affiliates of Mutual Companies With Assets Over One Billion Dollars
Classified by Type of Enterprise and Date of Affiliation

Enterprise Type	Number of Affiliates Entering a Complex								Totals
	1969	1968	1967	1966	1965	1960- 1964	1955- 1959	Pre- 1955	
Life Insurance Company	3								3
Property and Liability Insurance Company	1	2	2			1	2		8
Variable Annuity Company	2		1						3
Investment Advisory Firm (Securities)	2	5							7
Mortgage and Title Company									0
Insurance Agency		1							1
Real Estate Management or Advisory Firm	8	4	1			1			14
Real Estate Investment Trust or Redevelopment Firm	2	8							10
Credit Life Insurance									0
Accident and Health Insurance Company									0
Mortgage Broker									0
Service Company	1	1							2
Mortgage Lending Company									0
Insurance Broker or Dealer	6	5							11
Small Business Investment Company	1								1
Venture Capital Firm	1								1
Commercial Bank		1							1
Thrift Institution (Savings and Loan Association, Credit Union, etc.)							1		0
Investment Banking Firm									0
Leasing Firm									0
Factoring or Factoring Firm									0
Hedge Fund Management Company									0
Other Financial Service Firm	1	1						1	3
Broadcasting		1							1
Computer and Other Data Processing									0
Holding Company									0
Other Nonfinancial Enterprise	3	1				1			5
TOTALS	31	30	4	0	0	3	2	1	71

Note: Number of Mutual Companies included is 17.

Source: Responses to Study Questionnaire Form I-52, Part A.

Table VI-5

Affiliates of Mutual Companies With Assets of Less Than One Billion Dollars
Classified by Type of Enterprise and Date of Affiliation

Enterprise Type	Number of Affiliates Entering a Complex								
	1969	1968	1967	1966	1965	1960-1964	1955-1959	Pre-1955	Totals
Life Insurance Company	3		1						4
Property and Liability Insurance Company									0
Variable Annuity Company									0
Investment Advisory Firm (Securities)	1								1
Mortgage and Title Company									0
Insurance Agency									0
Real Estate Management or Advisory Firm	1	1			1				3
Real Estate Investment Trust or Redevelopment Firm	1	1							2
Credit Life Insurance									0
Accident and Health Insurance Company									0
Mutual Broker									0
Finance Company									0
Mutual Banking Company									0
Securities Broker or Dealer	4	2							6
Small Business Investment Company	1								1
Venture Capital Firm		1							1
Commercial Bank									0
Thrift Institution (Savings and Loan Association, Credit Union, etc.)									0
Investment Banking Firm									0
Lending Firm									0
Processing or Warehousing Firm									0
Food Management Company									0
Other Financial Service Firm	2								2
Broadcasting									0
Computer and Other Data Processing									0
Holding Company									0
Other Nonfinancial Enterprise	1	1							2
TOTALS	14	6	1	0	1	0	0	0	22

Note: Number of Mutual Companies included is 15.

Source: Responses to Study Questionnaire Form I-52, Part A.

The substantial affiliation with real estate investment trusts, land development firms, real estate management firms and mortgage and title companies reflects the strong interest shown by life companies in real estate as a form of equity investment during the latter portion of the 1960's.³⁴ Associations with investment advisory firms are sometimes primarily by-products of insurers' entry into the mutual fund industry, but the investment management, research and financial counseling skills that may be acquired in this way are especially valued by some insurers. Finance companies have sometimes been regarded as ideal complements to the insurance business since insurers receive funds in advance of lending and finance companies borrow in advance of lending.³⁵ Their lending operations, *per se*, are also essentially complementary. Securities broker-dealers affiliated with life insurers most often exist to offer mutual fund shares or variable annuity contracts.

There are nine affiliates reported in Tables VI-2 to VI-5 which were established for the purpose of making venture capital investments. A number of life insurers have investigated venture capital situations in recent years and many have made such investments either directly as a part of their general account or separate account assets or via subsidiaries especially created for this purpose. The Study inquired into insurers' venture capital activity and found that about half of the 58 respondents to this inquiry had made some venture capital investments during the past five years.³⁶ Only very modest sums have been involved to date however; generally less than \$10 million per annum even for the largest companies.

The nonfinancial enterprise affiliates of reporting life insurers consist of a variety of service and manufacturing operations including a few old fashioned life company hedges such as funeral homes and casket manufacturers.

Not surprisingly, state insurance regulators have viewed with concern the proliferation of noninsurance activities engaged in by insurance companies and, particularly, the control of insurers by noninsurance enterprises. This concern has led to state investigations of transactions between insurance companies and their affiliates, including, in particular, upstream dividends or other distributions paid by insurers to their controlling enterprises.

A flurry of legislative activity has ensued which generally has been aimed at providing more supervision by state insurance departments over the acquisition of insurers, whether by outside interests or at the insurer's initiative through creation of an upstream holding company, and more disclosure and regulatory control of transactions between insurers and their noninsurance affiliates. The National Association of In-

³⁴ All the entities reported in these tables are permanent operating firms. Real estate corporations or other entities created for the sole purpose of making a single investment are excluded. The extent of life companies' equity investment activity in real estate is discussed in sec. F.4.a. For a recent article on the subject, see "The Future Largest Landlords in America." *Fortune*, July 1970 at 90 et seq.

³⁵ Indeed, finance companies have been steady borrowers from life insurance companies. Some of the financial conglomerates whose affiliations are excluded from the tables have been heavily involved in finance company operations for some time (e.g., Transamerica Corporation).

³⁶ A "venture capital investment" was defined as, "an acquisition from an issuer of common stock or a similar security, an instrument convertible into such a security, or an instrument issued with a warrant, option or other right to purchase such a security, where the issuer is small, (e.g., the issuer's average annual net income, and that of any parent company, averaged less than \$250,000 per year for the two fiscal years immediately preceding any acquisition)." Larger companies reported a higher incidence of venture capital activity than smaller companies.

insurance Commissioners has proposed a model holding company law and regulations, many provisions of which have been enacted in a number of states. In addition to increasing the regulatory pressure in situations of noninsurance control over insurers, the 1969 New York legislation is aimed at inhibiting holding company development through positive inducements, including an expansion of the activities in which insurers are permitted to engage through subsidiaries, and increased financing flexibility achieved by authorizing stock insurers to issue more classes of equity issues and by providing stock companies with the same borrowing privileges as mutuals.³⁷ The New York law also liberalized the quantitative restrictions applied to life insurers with respect to investment in common stocks.³⁸

The concern leading to increased state legislative and regulatory activity was expressed by a Special Committee appointed by the New York State insurance superintendent as follows:

We have concluded that the holding company device, when it involves affiliation with non-insurance enterprises, jeopardizes the interest of both the public and the policyholder, and especially will do so if its development is indiscriminate and without benefit of close regulatory supervision.³⁹

This Committee expressed particular concern regarding motivations prompting the holding company movement.

While holding companies are not themselves new, the dominant motives for their formation may be changing from a desire to facilitate the conduct of the insurance business to a desire to shift away from the insurance business and to subordinate insurance to other business objectives. This change in motive will increase the strain on the established regulatory system.⁴⁰

About half of the 35 states responding to a questionnaire mailed by the Special Committee reported abuses encountered as a result of affiliations between insurers and noninsurance companies and control of insurers by holding companies. These abuses included various sorts of misrepresentation or misuse of assets, improper allocation of expenses, difficulties encountered by the regulators in verifying the financial condition or conducting examinations of insurers, improper management or employment contracts, fraudulent reinsurance agreements and inability, through lack of jurisdiction, of the insurance departments to review books and records of holding companies or other non-insurance affiliates or even to ascertain who controls certain insurance holding companies.⁴¹

At the heart of these expressions of concern regarding the holding company phenomenon is the fear that extensive conflicts of interest are being created between controlling persons and policyholders and other shareholders of the insurers involved. Examination of some of the potentially most severe of these conflicts are beyond the scope of the Study.⁴² However, conflicts created by the management of numerous investment accounts, including potentially, a general account,

³⁷ N.Y. Ins. Law §§ 46-a, 48(7) and 76 (McKinney Supp. 1969).

³⁸ *Id.*, § 81(13).

³⁹ State of New York. Insurance Department. Report of the Special Committee on Insurance Holding Companies, February 15, 1968 at 7.

⁴⁰ *Id.* at 32.

⁴¹ *Id.* at 50-52.

⁴² However, it should be observed that the New York State Special Committee expressed uncertainty as to whether state regulations could effectively "protect the public's and policyholders' interest in the presence of a proliferation in non-insurance control of insurance companies" and concluded that "total divestment of insurers from non-insurance control" may ultimately be required. *Id.* at 33.

various separate accounts, mutual funds, hedge funds, venture capital funds and real estate investment trusts are considered below.⁴³

2. Mutual Funds and Individual Variable Annuities

a. *The alternatives*

In announcing decisions to offer mutual fund shares or individual variable annuities, life companies have expressed their reasons for introducing such products in terms of "diversification to meet competition," "enlarging the scope of financial services" and "a natural extension of the firm's concept of financial planning and income protection." By introducing substantial customer participation in equity investment risks, these products represent a major change in marketing strategies. As a result, insurers are consciously offering financial services which may sometimes be competitive with, rather than complementary to, the sale of traditional insurance products.

Once a life insurer has made the decision to offer individual equity based products, it normally chooses between mutual funds and variable annuities.⁴⁴ Mutual funds have the advantage of being well established and accented products which can be offered within a reasonably settled and well defined regulatory framework. Also, prior to insurers' entry into mutual funds, a number of life insurance salesmen had qualified to sell and were in fact selling fund shares. There is a general presumption that funds, like insurance policies, require active selling practices and some observers feel that life insurers' investment organizations, resources and large, trained sales forces place them in a position where they not only can be successful in marketing mutual funds but seriously threaten to dominate mutual fund selling within a decade.⁴⁵ Finally, beginning with a mutual fund provides the insurer with an investment vehicle which may be utilized subsequently by variable annuity separate accounts registered with the Commission as unit investment trusts.⁴⁶

The reluctance of some insurers to use mutual funds as the initial equity based product stems from the belief that offering of mutual fund shares is a basic departure from traditional fixed income, guaranteed insurance products. This may constitute a step that many life insurance agents, habituated to adverse comparisons of the riskiness of mutual funds with the certainty of insurance payoffs, may not be able to accept easily. Consequently, substantial changes in selling, recruiting and training methods may be required. An opposite concern is, of course, that successful mutual fund marketing may erode rather than bolster sales and induce lapses of life insurance policies.

Variable annuities have the advantage of constituting a smaller step; that is, a modification of a traditional insurance product as opposed

⁴³ See sec. F.6.

⁴⁴ Generally, companies have chosen one or the other route and then sometimes followed with the second product. Simultaneous entry into both markets is rare although the Prudential Financial Security Program, which began operation in California in January 1970, amounts to simultaneous entry.

⁴⁵ See, for example, Virginia D. Puder, "The Revolution within the U.S. Life Insurance Industry," *Financial Analysts Journal*, July-Aug. 1970 at 60; the *Wall Street Journal*, "Rush to Mutual Funds by Insurance Companies Approaches Stampede," February 25, 1970, at 1; Charles Kannel, "Life Companies and the Mutual Fund Business: The Out-Herding of Herod," (Paper Presented to the Association of Life Insurance Counsel, December 8, 1969, New York, at 1.) and Everett Mattlin, "New Policies for Insurance Companies," *The Institutional Investor*, January 1970, at 97.

⁴⁶ See Robert J. Rontler, "The Mutual Fund Approach to Equity Products," Proceedings of the 61st Annual Meeting of the Legal Section of the American Life Convention, 1968 ("Routier") 13-14.

to entry into a foreign and competing industry. Annuities, variable or fixed, are viewed as complementary to life insurance in the sense that they provide life insurance beneficiaries with convenient products to utilize as a settlement option, or as a place to put funds received from maturing endowment policies. On the other hand, excepting certain specialized markets, individual annuities have proved to be complicated and difficult products to sell. These specialized markets consist primarily of markets in which tax considerations are an important factor in the decision to purchase an annuity.

The individual purchaser of an annuity pays no tax on income attributable to his investment until income is realized by him.⁴⁷ In general, receipt of proceeds under an annuity contract (whether fixed or variable) is treated by the Internal Revenue Code as a partial return of capital and a partial receipt of taxable interest. Specifically, the code provides that of the amount received in each annuity payment, a certain percentage, representing a return of capital, is to be excluded from gross income. The "exclusion ratio" used is determined by dividing the amount invested in the contract (as of the date the annuity payment period begins) by the expected return on the contract (determined by mortality, expense and investment return assumptions). The exclusion ratio thus determined is applied to each annuity payment received by the taxpayer. Thus, should the taxpayer die before reaching his actuarially determined life expectancy, he will have, in effect, paid taxes on returned investment capital.⁴⁸ On the other hand, should he outlive his life expectancy, he will receive a windfall in the form of interest payments which, because they are treated as return of capital, are tax free.⁴⁹

If the annuitant surrenders his contract or dies before the annuity payment period begins, then the amount received, minus the amount of the annuitant's investment, is taxed as ordinary income. If the insurance company makes provision for payment of capital gains tax on unrealized appreciation, the amount received by the annuitant or his estate is somewhat less than his actual prorata share of the increase in value of the funding account. In contrast, a mutual fund shareholder who redeems his shares typically receives full net asset value without any deductions based on unrealized appreciation, and pays capital gains tax rather than ordinary income tax.

Thus, individuals in a higher income bracket may find a single premium deferred annuity useful as a means of deferring taxes. In this respect an annuity is more attractive than a mutual fund. Of course, mutual funds will be a preferable vehicle if the potential purchaser has a shorter investment time horizon or there is a significant possibility he may wish to redeem the investment during the high earnings period of his life. Probably the most promising markets for variable annuities are the so-called "tax sheltered" or "tax deferred" markets created by Section 403(b) of the Internal Revenue

⁴⁷ The tax on employees who receive annuities through pension-retirement plans is discussed in ch. VIII, B. 4.

⁴⁸ This is a generalized statement. Annuities with refund provisions are treated differently.

⁴⁹ Int. Rev. Code of 1954, § 72.

Code,⁵⁰ and self-employed individuals eligible for tax treatment analogous to employees participating in qualified pension plans.⁵¹

Variable annuities are usually offered by the insurer itself, whereas mutual funds are separate entities, and since a mutual fund is not an insurance product, the only state insurance regulatory problem is usually that of obtaining statutory authorization to establish the necessary subsidiaries.⁵² This authorization was provided to New York companies only in late 1969.⁵³ Variable annuities, on the other hand, may create more federal-state regulatory conflicts since they are securities for purposes of application of the federal securities laws and are regulated as insurance products by the state insurance departments. It has taken time for the Commission to work out a regulatory pattern which meets some of the special problems of a complex product offered by insurers operating under dual regulation, and consequently it has normally required more time to register a variable annuity than a mutual fund.

b. The mutual fund route

If an insurer decides to take the mutual fund route there are several alternative means of achieving entry. One possibility is to acquire an existing management and distribution complex; a second way is for the insurer to create its own fund complex, and finally the insurer may execute a variety of selling agreements with existing (or new) funds. Acquisition of a management company is likely to be the most costly alternative in terms of initial capital investment. It has the advantage of being a much faster mode of entry than creating a fund,⁵⁴ avoiding the legal and administrative start-up difficulties, providing a means of acquiring the necessary management skills and permitting entry with a fund which has reached or is close to reaching an economically efficient size.

On the other hand, most of the largest insurers have preferred to create their own funds. This is considered a desirable method because it permits the company to choose a name for the fund which identifies it with the insurer, provides a better means of developing the fund with the investment objective and image the insurer seeks and permits closer control over the management of the fund.

Either acquisition or creation will be chosen if the insurer is interested in the direct profit obtainable from managing a fund complex.

⁵⁰ Section 403(b) of the Int. Rev. Code of 1954 provides that employees of tax exempt religious, charitable or educational institutions (§ 501(c)(3)) and employees of public schools, who receive part of their compensation in the form of non-forfeitable annuities purchased for them by their employer, may exclude the employer's contributions from gross income up to the amount of the "exclusion allowance" determined under Section 403(b). The return on the annuity is then taxed pursuant to Section 72.

⁵¹ Deferral benefits were provided for self-employed individuals by the Self-Employed Individuals Tax Retirement Act of 1962. The individual may annually deduct his contributions to the plan (known as an "H.R. 10" plan) on his own behalf up to a maximum of the lesser of 10 percent of earned income from trade or business or \$2,500. He may also deduct contributions he makes on behalf of his employees. Distributions are generally taxed as ordinary income, though lump sum distributions may be averaged over a five-year period. The amount of each annuity payment to be included in gross income is determined by applying the exclusion ratio. But if the amount of capital contributed by the participant can be recovered in the first three years, then all payments are excluded until the invested capital is recovered, after which all payments are included in gross income.

⁵² State securities laws do apply, of course, and insurers have been advised to exercise care in the selection of the state of incorporation for a mutual fund. See Router 15.

⁵³ N.Y. Ins. Law § 46-9 (McKinney Supp. 1969), effective Sept. 1, 1969.

⁵⁴ Thus, the President of CNA has been quoted as attributing CNA's decision to acquire Tsal Management rather than start a new fund to the fact that "we were in a hurry so we decided the best bet was to pick up an existing fund." (*Business Week*, March 15, 1969 at 115.)

If the motivation is limited to providing a means of making insurance agents more competitive and credible as financial advisers, as well as to bolster their income, with the hoped for consequences that sales of insurance products will be positively affected, then sales agreements with several unaffiliated funds may be the advisable route. This is the one most often chosen by smaller insurers. Normally the insurer proceeds alone, or in concert with other insurers, to form a broker-dealer subsidiary. The insurer then executes selling agreements with mutual funds. Thus, for example, eight life insurers combined in a joint venture to establish LINSICO Corporation, a registered broker-dealer which sells shares of about 100 different funds.

As of March 1, 1970, there were 161 life insurers which were themselves members, or had one or more broker-dealer subsidiaries which were members, of the National Association of Securities Dealers. Of these, 32 were selling their own funds. Over 100 of the remaining companies were selling unrelated funds.⁵⁵ Of 61 insurers who responded to that portion of the Study's questionnaire dealing with mutual funds and other equity based products,⁵⁶ 26 companies reported that as of the end of 1969, they had directly or indirectly created one or more funds or acquired one or more funds or fund management companies.⁵⁷

These 26 companies reported managing directly, or through affiliates, 61 funds. Several of these were in registration, or had been registered but were not yet being offered as of December 31, 1969, and seven had no assets as of that date. The distribution of these funds among mutual and stock companies and by size of insurer is summarized in Table VI-6. Consistent with the discussion above, this Table indicates that a lower proportion of smaller insurers have created or acquired a fund complex. There is some indication that stock companies have been more prone to enter the mutual fund business in this manner than have mutual companies of similar size, but the differences are small. As observed above, insurers domiciled in New York State were not permitted to create or acquire mutual fund subsidiaries prior to September 1, 1969, but apparently two of the four large New York insurers were prepared to take advantage of the opportunity, since funds from two of these companies are included in those shown in Table VI-6.⁵⁸

⁵⁵ Thirty-nine insurers were selling variable annuities, of which 17 were among the 32 offering their own funds. This leaves 107 companies plus perhaps some of the 22 remaining variable annuity sellers who were presumably selling shares of unaffiliated funds.

⁵⁶ Form I-52, Part B.

⁵⁷ One respondent indicated it had acquired a fund, but not its management company. There were actually 63 respondents to this portion of the questionnaire, but TIAA-CREF and Investors Syndicate Life are excluded, the latter because the Study is interested here in explaining life insurance company entry into mutual funds rather than the opposite. Three of the 11 Canadian companies did not respond.

⁵⁸ Neither company expected to be offering its fund until the second half of 1970.

Table VI- 6

Mutual Funds Managed by Reporting Insurers or Their Affiliates
as of December 31, 1969

	Group I		Group II		Group III		Group IV	
	Mutual	Stock	Mutual	Stock	Mutual	Stock	Mutual	Stock
Number of companies in sample	5	0	2	3	11	6	17	17
Number of companies having mutual funds	3	0	1	3	6	4	4	5
Total number of funds	4		9		35		13	
Asset value of all funds (dollars)	23,488,142		308,151,525		1,239,392,051		209,038,326	
Number of funds created by companies	4		6		18		12	
Asset value of funds created by companies (dollars)	23,488,142		44,019,562		102,884,766		194,681,581	
Number of existing funds whose management companies were acquired by respondent company	0		3		6		0	
Asset value of funds whose management companies were acquired by respondent company (dollars)	0		264,131,963		273,916,275		0	
Number of existing funds whose management companies were acquired by an affiliate of a resp. company	0		0		11		1	
Asset value of funds whose management companies were acquired by an affiliate of a respondent company (\$)	0		0		862,591,010		14,356,945	

Note: Size groups are defined as follows:

- Group I: Insurers with assets in excess of \$9 billion.
- Group II: Other insurers with assets in excess of \$4 billion.
- Group III: Other insurers with assets in excess of \$1 billion.
- Group IV: All other reporting insurers.

Source: Responses to Study Questionnaire Form I-52, Part B.

Forty of these 61 funds reported had been created by the life companies. Since most of these are new funds (see Table VI-7), they are quite small; in fact, only two reported net assets significantly in excess of \$25 million. Combined, these 40 funds had a net asset value of only \$365 million.⁵⁹ The remaining 21 funds which are affiliated with responding insurers by means of acquisition⁶⁰ had net assets of \$1.4 billion.⁶¹ Thus, total net assets of these insurers' mutual funds amounted to less than \$1.8 billion as of end-1969.⁶² As Table VI-7 shows, entry by life companies into mutual funds began in earnest only in 1968. Nineteen of the 21 acquisitions occurred during 1968-69 and 34 of the 40 funds started by life insurers were first offered in 1968 or 1969, or were expected to be offered in 1970.

TABLE VI-7.—DISTRIBUTION OF FUNDS AFFILIATED WITH LIFE INSURANCE COMPANIES BY YEAR OF AFFILIATION

	Funds created		Funds acquired, acquisition date
	Incorporation date	Initial offering date	
Pre 1966.....	5	5	1
1966.....	4	1	0
1967.....	1	1	1
1968.....	17	12	10
1969.....	13	13	9
1970.....	(1)	19	(1)
Total.....	40	40	21

¹ Coverage is limited to funds in existence and affiliated with life insurers as of Dec. 31, 1969. The 1970 offering rates are estimates.

Source: Responses to Study Questionnaire, Form I-52, Table II.

Some mutual funds have been established by life companies solely for the purpose of serving as funding vehicles for separate accounts. Nine of the 61 funds can be so characterized.⁶³ Fifty-one were being offered or were intended to be offered directly to the public.⁶⁴ Eight of these 51 were also used as funding media for one or more of the insurers' separate accounts. This characterization of the function served by funds is summarized by insurer size and fund assets in Table VI-8.

⁵⁹ Wiesenberger Financial Services, Inc. reports 55 funds created by all types of insurers in existence as of September 30, 1969. At that time the net asset value of these funds was \$413 million. See their *Mutual Affairs*, Vol. 9, November 1969, at 2.

⁶⁰ These 21 acquisitions were accomplished by only six insurers.

⁶¹ Wiesenberger estimates that as of September 30, 1969, management companies with some \$7.5 billion of mutual fund assets have been acquired by insurers of all types. (See *ibid.*) Some very substantial acquisitions by Life Insurers are not included in the Study's sample, of which the most significant was Washington National Insurance Company's acquisition of Anchor Corporation which managed nearly \$2 billion in assets (as of September 30, 1969) of four mutual funds.

⁶² In the discussion of property and liability companies below (Section I.2.) it is indicated that ten of the insurance groups sampled had entered the mutual fund business via creation or acquisition of a fund complex by end-1969. These ten groups managed about \$2.4 billion in mutual fund assets as of the end of 1969. About \$700 million of these assets are also included in Table VI-6. Most of the remainder would have been included in Table VI-6 if, as explained in note 30 above, four other life insurers had not been dropped from the sample. Thus the Study's life insurance and property and liability insurance samples combined pick up a little less than half of the mutual fund assets which have come under the control of insurance companies.

⁶³ These had a combined net asset value of about \$9.5 million on December 31, 1969.

⁶⁴ One of the 61 funds, which was in registration as of December 31, 1969, did not respond to this particular inquiry.

Table VI-8

Insurers' Mutual Funds Classified According to Whether They Are Sold Directly to the Public,
Function as Investment Media for Separate Accounts or Both

	Size Groups							
	I	Net Asset Value (\$mil.)	II	Net Asset Value (\$mil.)	III	Net Asset Value (\$mil.)	IV	Net Asset Value (\$mil.)
	Number of Funds		Number of Funds		Number of Funds		Number of Funds	
1. Offered Directly to the Public	2	18.5	6	117.3	27	1231.4	8	32.3
2. Serve Only as Investment Vehicles for Separate Accounts	2	5.0	2	3.8	5	0.7	0	0
3. Both 1 and 2	0	0	1	187.1	2	7.2	5	176.7
4. No Response	0	0	0	0	1	0	0	0
5. Totals	4	23.5	9	308.2	35	1239.4	13	209.0

Note: For the definition of size groups, see Table VI-6.

Source: Responses to Study Questionnaire Form I-52, Part B, Table II.

Table VI- 9

Insurers' Mutual Funds Characterized by Sales Personnel Utilized

	Size Groups							
	I		II		III		IV	
	Number of Funds	Net Asset Value (\$mil.)	Number of Funds	Net Asset Value (\$mil.)	Number of Funds	Net Asset Value (\$mil.)	Number of Funds	Net Asset Value (\$mil.)
1. Sold <u>exclusively</u> by insurers' agents or other personnel	2	18.5	0	0	6	83.2	5	26.5
2. Sold <u>exclusively</u> by agents or employees of an affiliated company	0	0	2	12.4	5	14.8	3	10.6
3. Sold <u>exclusively</u> by insurers' personnel and personnel of affiliated companies	0	0	0	0	2	215.5	1	2.6
4. Sold <u>exclusively</u> by persons unaffiliated with the respondent insurers	0	0	3	264.1	3	51.2	0	0
5. Sold both by persons affiliated and unaffiliated with the respondent company	0	0	2	27.8	15	874.0	4	169.3

Note: For a definition of insurer size groups, see Table VI-6.

Source: Responses to Study Questionnaire, Form I-52, Part B, Table II.

Although most insurers appear to have entered the mutual fund industry in order to broaden the scope of financial services offered by agents, thereby increasing agents' income and hopefully boosting insurance sales,⁶⁵ insurers' funds are not exclusively sold by agents. Table VI-9 shows that of the 53 funds which are sold directly to the public, 27 are sold by persons unaffiliated with the insurer as well as (in most cases) by the insurers' agents or other personnel. These 27 account for three-quarters of the assets in funds which are offered to the general public. Although the majority of the 27 represent funds which were acquired by the insurers, some funds created by insurers are sold by unaffiliated persons. Frequently, life companies also find it necessary to permit their agents to sell unaffiliated funds, at least when an agent's customer so desires. In addition, nine companies which have their own funds reported that they (or an affiliated company) also have selling contracts with unrelated funds under which the agents or other sales personnel of the insurer or its affiliates sell shares of these unaffiliated funds.⁶⁶

Of the 35 companies which do not have their own funds, 11 reported that they had directly or through affiliated companies contracted to sell shares of unaffiliated mutual funds.⁶⁷ Three of the seven Group III companies that do not have their own funds and seven of the 20 Group IV companies in this position had firm plans to offer shares of a newly created or to-be-created fund. No respondents had firm plans to acquire the management company of an existing fund. One Group I insurer and one in Group III had creation of a fund under consideration. One Group IV company had the acquisition route under consideration and one Group III and two Group IV companies reported that both fund creation and acquisition were currently being considered. The remaining Group I company, the only Group II company without its own fund, and one Group IV company each reported having considered and rejected proposals to create their own funds. Two Group IV companies indicated they had considered and rejected acquisition of a fund complex, and one Group III and nine Group IV insurers reported considering and rejecting both the creation and acquisition means of entry. Only four companies (one in Group III, three in Group IV) responded that no consideration had been given to either creation or acquisition of a fund complex. These responses add up then to 10 companies with definite plans to create funds, 15 which have considered creation or acquisition or both and rejected such proposals, six with one or both of these forms of entry under consideration and only four companies that have not considered either possibility.⁶⁸

The Study inquired into the motivations behind entry into mutual funds via fund creation or acquisition by asking each respondent which had its own fund(s) to rate the importance of various factors in in-

⁶⁵ See the discussion of insurer motivations below.

⁶⁶ Two of the nine companies were in Size Group II, five in Group III and two in Group IV. (Size group definitions appear in Table VI-6.)

⁶⁷ One of the 11 is in Size Group III; ten were in Size Group IV. The Group III company and five of the Group IV companies are mutuals.

⁶⁸ The smaller companies in the sample were chosen because they had exhibited some evidence of interest in expanding beyond traditional insurance products into variable annuities, mutual funds or other enterprises. Thus, the high degree of consideration given to or action taken in the mutual fund business by these companies cannot be extrapolated to the remainder of the life insurance industry.

fluencing their positive decisions. The respondents were provided with the following list of potential factors:

- (a) A means of increasing sales of individual insurance policies.
- (b) A means of increasing sales of group insurance policies.
- (c) A means of increasing sales of individual annuity policies.
- (d) A means of increasing sales of group annuity policies.
- (e) A means of developing a financial package (including insurance and savings features) more salable than traditional products in an inflationary environment.
- (f) A means of increasing agents' income.
- (g) A means of combatting a decline in sales (or rate of growth of sales) of traditional insurance products.
- (h) A means of combatting a decline in sales (or rate of growth of sales) of traditional annuity products.
- (i) A means of diversifying beyond traditional business as an insurer.
- (j) A means of more fully utilizing in-house investment staff expertise.
- (k) A means of adding to in-house investment expertise by acquiring investment management skills.
- (l) A means of increasing the company earnings without having any necessary impact upon sales of insurance and annuity contracts.
- (m) Other (specify).

Three of the factors stood out as being highly important considerations to most of the respondents,⁶⁹ namely that mutual funds provided 1) a means of developing a financial package more salable than traditional products in an inflationary environment, 2) a means of increasing agents' income, and 3) a means of increasing sales of individual insurance policies. In addition, exactly half of the 26 companies regarded mutual funds as one step in the direction of creating a diversified financial institution. Very few companies cited a decline in insurance or annuity sales, or a decline in the rate of growth of sales, as a significant consideration. On the other hand, only four (one Group II and three Group III) companies viewed mutual funds as a means of increasing earnings independent of any impact upon the sale of insurance or annuity contracts. Those few companies which use their mutual fund exclusively for funding annuity contracts, of course, considered mutual fund entry a means of increasing annuity sales. Only four companies considered the addition of investment skills a significant factor in the decision to acquire funds, but nine indicated that the fact that mutual funds provided a way of more fully utilizing their existing investment staff was important. In general, the responses suggest that insurers have entered into mutual fund activity for positive reasons, that is, more to stimulate sales and to obtain the benefits of financial diversification and less because they felt it necessary to act defensively in the face of actual or forecasted reductions in the growth of sales of traditional products.

⁶⁹ Respondents rated each factor as i) not a consideration, ii) a marginal consideration, iii) important, or iv) of critical importance. See Form I-52, Part B, Question 7.1-7.2.

c. *The variable annuity route*

Insurers' interest in variable annuities as an equity based product dates back to 1952 when the Teachers Insurance and Annuity Association (TIAA) created a companion organization, the College Retirement Equities Fund (CREF).⁷⁰ CREF was founded for the sole purpose of providing variable annuities to complement the fixed annuities.⁷¹ In the mid-1950's, several enterprises were chartered for the purpose of writing variable annuities. These included the Participating Annuity Life Insurance Company (PALIC), chartered in Arkansas in 1954, the Variable Annuity Life Insurance Company, Inc. (VALIC), incorporated as a life insurance company in the District of Columbia in 1955,⁷² and the Equity Annuity Life Insurance Company (EALIC), chartered in 1956, also in the District of Columbia.⁷³ In the meantime (1955), the Prudential Insurance Company of America was urging the New Jersey legislature to authorize licensed life insurers to issue variable annuities. Prudential's action was strongly opposed by many insurers, led by the Metropolitan Life Insurance Company, on the grounds that the variable annuity concept was wholly incompatible with the purpose and function of insurance. In this widely publicized battle, which was waged over nearly a decade, the Metropolitan was joined by the National Association of Investment Companies, the Investment Bankers Association of America, the New York Stock Exchange and the National Association of Securities Dealers.

In 1956 the Commission sought to enjoin VALIC and EALIC from selling variable annuities without registering under the Securities Act and the Investment Company Act. The Commission was upheld by the Supreme Court in 1959⁷⁴ and subsequently the companies were registered under the Securities Act and the Investment Company Act. PALIC limited its activity to a narrow group of customers until 1964 when it expanded its operation and registered with the Commission.⁷⁵

Largely because of the opposition to the variable annuity concept from within the life insurance industry the New Jersey legislature did not enact variable annuity authorization until 1959.⁷⁶ The Prudential agreed to register under the Securities Act but contended that its status as a life insurer provided it exemption from the Investment Company Act. The Commission denied Prudential's contention, and

⁷⁰ Curiously, the first insurer entry into mutual funds also appears to have occurred in 1952 when Nationwide Insurance acquired a mutual fund management company. TIAA was established in 1918 as an insurance company under New York insurance law. However, it operates as a nonprofit organization with eligible customers limited to staff members of colleges, universities and specified nonprofit research and educational institutions. CREF is not a life insurance company but is a membership corporation authorized by special action of the New York State legislature, and regulated to a limited extent by the Superintendent of Insurance.

⁷¹ In the early 1950's several corporate pension plans also established variable annuity features. See the discussion in George E. Johnson, and Donald Grubbs, *The Variable Annuity*, (The Research and Review Service of America, Inc., 1970) at 77-86 ("Johnson and Grubbs").

⁷² Actually, the original corporation was dissolved when the Commission challenged its right to operate outside the framework of the Securities Act of 1933 and the Investment Company Act of 1940. The successor corporation, referred to in the text, was organized later in the same year (1955).

⁷³ EALIC was controlled by the American General insurance group. In 1967, American General acquired VALIC which in turn absorbed EALIC.

⁷⁴ SEC v. Variable Annuity Life Insurance Company, 359 U.S. 65 (1959).

⁷⁵ In 1967, a controlling interest in PALIC was acquired by the Aetna Life Insurance Company.

⁷⁶ N.J. Stat. Ann. § 17:35A.

upon appeal, the United States Court of Appeals for the Third Circuit upheld the Commission in January 1964.⁷⁷ Under the Commission's action, as supported by the courts, variable annuities are securities which must be registered under the Securities Act and the separate account used as a funding medium is an investment company required to register under the Investment Company Act. Certain exemptions from the Investment Company Act have been provided insurers by the Commission.⁷⁸

Since the states regard variable annuities as an insurance product, life insurance companies issuing variable annuities are under dual regulation on this part of their business. All states, except North Dakota, now permit the sale of variable annuities and the use of separate accounts for funding purposes.

The term "variable annuity" is used to cover a variety of contractual arrangements. Most commonly, however, the concept refers to a contract providing an annuitant with life-time income payments, the amount of which depends upon the market value of an annuity fund at the time of payment. Periodically during the accumulation period or via a lump sum, the contract-holder makes payments into a dedicated account, the amount of contributions being determined by the participant. His contributions, after deductions for sales and other loading charges, purchase accumulation units, the number of such being determined by the size of the contribution and the current value of a unit. When the payout period is reached the value of the accumulation fund is usually transferred into annuity units. The monthly annuity payment is expressed in terms of a specified number of units; the dollar value of a monthly unit varies with the value of a unit which in turn is a function of the performance of the funding investment account. The degree of variability in payments made is affected by the "assumed interest rate" used in determining the initial benefit payment level. Thus, the value of the initial payment will be higher, the higher the assumed interest rate, but the chances of the benefit level increasing is thereby lowered, (and the chances of benefit payments declining is increased), since the annuity unit value increases (decreases) only to the extent that the fund's net investment return deviates upward (downward) from the assumed interest rate.

The line between fixed and variable annuities is not always clear.⁷⁹ Many combination contracts are possible including, for example, equity funding during the accumulation period followed by fixed dollar annuity payments. Various mutual fund-insurance policy combinations have been designed with annual withdrawal features. Also, some contracts call for annuity benefits to vary with a cost of living, wage, interest rate or other index or to increase over time according to a stipulated formula rather than varying in response to the performance of a dedicated investment account.

The essence of a variable annuity based on investment performance of an equity portfolio is that the annuitant assumes the investment risk. The CREF product is fully participating, that is, annuitants as-

⁷⁷ Prudential Insurance Co. v. SEC, 326 F.2d 383, cert. denied 377 U.S. 953.

⁷⁸ See the more complete discussion of the history of Commission regulation of variable annuities and separate accounts in ch. VIII.B.

⁷⁹ For a description of the variety of arrangements in existence, see Johnson and Grubbs above note 71, at 41-55.

sume all the risks. However, variable annuities issued by ordinary insurers generally contain expense and mortality guarantees, for which a fee is charged, so that participants bear only investment risks. This gives the product more of an insurance cast and provides insurance companies with the potential for profits or additions to surplus from their normally profitable business of accepting underwriting risks.

Individual annuities have generally been a product of distinctly secondary importance for most insurers. During much of the period since World War II, individual annuity sales were quite sluggish, reflecting the low interest rates life insurers were capable of offering under the prevailing methods of crediting investment return to annuity policies.⁸⁰

During the 1960's some companies have experienced an increase in the sale of individual fixed annuity policies as life insurers' introduced a new method of crediting investment return⁸¹ and the tax sheltered field developed. This is reflected for the four years 1966-1969 in the summary reserve figures displayed in Table VI-10 for the Study's sample of insurers. In order to concentrate on the annuity business of traditional insurers, reserves of the specialty annuity companies (TIAA-CREF, VALIC and PALIC) are excluded from this table.⁸²

Despite the long period of discussion and anticipation regarding the variable annuity, Table VI-10 shows that none of the traditional life insurers reporting had individual variable annuities in force as of end-1965 and by end-1969 reserves on individual annuities based on separate account funding amounted to only \$34.4 million, plus a negligible amount in index or formula based annuities.⁸³ A survey of the industry conducted by the Institute of Life Insurance showed that as of the end of 1969, reserves on individual annuity contracts, based on equity fund performance, amounted to just \$78.7 million and reserves on plans providing variable results based on a cost of living index amounted to only \$108,000.⁸⁴

⁸⁰ That is, investment return traditionally was credited to the various policies and contracts on the basis of the average investment income realized on the insurance companies' general investment account. During the 1930's, this average return was significantly higher than the current yields at which funds could be invested since life companies invest in relatively long-term obligations. This fact, together with the financial strength demonstrated by life insurers relative to the savings depositaries produced a substantial demand for single premium annuities. In the postwar period, rising interest rates made the average return on insurance company investments unattractive.

⁸¹ The reference is to the "investment year method" of crediting interest which is discussed below in connection with group annuities (sec. 3.b.) Basically, this method reflects yields obtained during the period in which funds generated by particular contracts or lines of business were invested. A number of companies have adopted this crediting method at least for single premium individual annuities. Use of the method protects against the sort of investment anti-selection inherent in the comparison between the 1930's and 1950's in the previous footnote.

⁸² TIAA and CREF alone had reserves of over \$2.9 billion at the end of 1969 which is equivalent to two-thirds of the reserves reported by all the sampled companies in Table VI-10.

⁸³ VALIC and PALIC combined have substantially more individual variable annuity reserves than all these insurers. CREF's portion of TIAA-CREF's \$2.9 billion was \$1.3 billion.

⁸⁴ *Tally of Life Insurance Statistics*, December 1970. Reserves on group plans with variable features amounted to \$1.36 billion, and group index based plans to \$383 million. Group variable annuities are discussed below. See sec. D.5.

Table VI-10
Reserves on
Individual Annuity Contracts in Force
Respondent Life Insurance Companies
End-1965 and 1969

	1965 Reserves (000 omitted)	1969 Reserves (000 omitted)
1. Fixed Annuities Based on General Account Funding		
1.1 In course of payment	\$1,861,369	\$2,190,767
1.2 Deferred	1,514,667	2,185,585
2. Annuities Based on Separate Account Funding		
2.1 In course of payment	0	3,174
2.2 Deferred	0	31,213
3. Annuities Based on Index or Formula	0	1,016
4. Totals: All Individual Annuity Contracts Out- standing	3,376,036	4,411,755

Note: Reserves of the annuity specialty companies, TIAA-CREF, VALIC and PALIC are excluded.

Source: Study Questionnaire Form I-52, Part B, Table III.

Of the 61 companies responding to this inquiry, only 23 were offering individual annuities based on separate account funding as of end-1969.⁸⁵ These included two Group I companies, three from Group II, five from Group III and 12 Group IV companies, three of which were Canadian.

There are several possible explanations for the weak impact made by individual variable annuity policies to date. Because of the heated disagreement in the insurance industry over the appropriateness of the variable annuity as an insurance product and, perhaps, because of the long litigation over the applicability of the federal securities laws, many states enacted the necessary authorizing legislation only late in the 1960's.⁸⁶ No doubt, some insurers find the concept and practice of dual regulation troublesome. Thus, two insurance variable annuity experts allege:

This system of dual regulation is extremely burdensome. The sale of individual variable annuities has unquestionably been slowed down by the dual system of regulation.⁸⁷

Also as observed above, the variable annuity is a complex product and its marketing success may well be limited to specialized markets including so-called "Tax Sheltered Annuities" eligible under Section 403(b) of the Internal Revenue Code and the self-employed H.R. 10 plans.⁸⁸ It is questionable whether sales to non-tax sheltered, non-tax qualified individuals will ever contribute to the flow of savings to life companies on a scale that will have a major impact on the equity market.

In entering both the variable annuity and mutual fund markets, insurers have tended to move cautiously. It takes time to determine which agents should be trained to sell equity based products, and then to get them oriented and licensed to sell in these markets. Caution in designing sales procedures is required to ensure that the sale of traditional insurance products is not adversely affected. From the insurers' perspective, the provisions of adequate inducement to agents is a problem since the Investment Company Act limits sales loads which can be assessed in the sale of mutual funds and variable annuities. Agents are, of course, also restricted in the same way as other mutual fund salesmen in approaching and selling prospective customers.

Nonetheless, most large firms that were not yet selling variable annuities as of December 31, 1969, had firm plans to do so. This applies to all ten companies in size Groups I and II.⁸⁹ Of the 17 Group III companies, five were in the business as of the end of 1969 and six of the remaining 12 had firm plans to enter. However, only 10 of the 34 Group IV companies had sold such policies and only four others were committed to do so. Another three Group III companies had

⁸⁵ In addition, Aetna Life offered such policies through its subsidiary, PALIC.

⁸⁶ A number of states authorized variable payouts in group annuity contracts without extending permission to the sale of individual variable contracts. Thus, for example, New York State approved the former in 1965, but the latter only in 1968.

⁸⁷ Johnson and Grubbs above note 71, at 18.

⁸⁸ In both these areas, both group contracts and individual contracts are sold. See the breakdown of separate account assets by type of participating contract in Table VI-66 below. For discussion of the marketing appeal in these areas see Johnson and Grubbs above note 71, at 24 and Campbell below note 114, at 49-53.

⁸⁹ Counting Aetna's sales through PALIC. Of the other nine large insurers, five were selling individual annuities based on separate account funding as of the end of 1969, and the other four had firm plans to offer such policies.

individual variable annuities under consideration, two had seriously contemplated and rejected the product and only one had not reached the point of serious consideration. Among the Group IV companies there were 21 not selling individual variable annuities at the end of 1969, of which four had firm plans to offer such contracts, seven had it under consideration, six had considered and rejected the possibility and four had not yet considered a proposal.⁹⁰

Life insurance agents are classified according to the type of contractual relationship they have with companies and according to whether they are full-time or only part-time agents. Thirty-nine of the reporting companies utilize branch office agency systems. Each branch office is supervised by a salaried manager who normally receives a base salary plus an amount based on new business acquired and renewal premiums paid. The agents employed in the branch offices are contracted solely to the insurer, and all expenses of maintaining the office are assumed by the insurance company.⁹¹ The 39 companies with branch office systems reported employing a total of 172,000 agents in these systems.

A few companies make use of branch office agents to the exclusion of any other agents. Most, however, also have contractual relationships with general agents or insurance brokers. A general agent is an independent contractor who is normally the exclusive representative of his insurer in a specified territory. The general agent is compensated on a commission basis, plus servicing fees for renewal business and often will receive a contribution toward the maintenance of his office. He hires subagents who are under contract to the general agent and receives compensation on a scale determined by the general agent. Forty-three companies reported that they utilized general agency systems and had 146,000 agents in these systems.

Insurance brokers, as the name suggests, have relationships, contractual or informal, with many companies. Many of the respondent insurers had difficulty estimating the number of insurance brokers under contract to them so no meaningful total is available.

As of the end of 1969, 30 responding insurers had agents qualified to sell the companies' variable annuities. The total number of agents so qualified amount to nearly 17,500 or about 5.5 percent of all branch office and general agency agents reported.⁹² Some 33 companies reported that some of their agents were fully qualified to sell mutual fund shares. A total of 19,200 agents were so qualified or about six percent of the total number of branch office and general agency system agents reported. These include agents qualified by the responding company to sell funds unaffiliated with the company. Undoubtedly there are additional agents who are qualified and are selling funds unbeknown to their insurance companies. Most companies have, however, moved forward at a deliberate pace, selecting their best agents

⁹⁰ The same disclaimer entered above with regard to mutual funds applies to extrapolation of this expressed interest in variable annuities to the remainder of the life insurance industry.

⁹¹ See Joseph B. MacLean, *Life Insurance* 360 et seq. (1962) for a description of the various types of agency organizations and their relationship with employees.

⁹² Some companies included insurance brokers in their estimate of number of agents qualified to sell variable annuities and mutual funds. However, the numbers involved appear to be small so the estimate of the proportion of agents qualified is not much affected. If agents reported by those companies which are not selling variable annuities are excluded, the proportion of qualified agents in those companies which do offer variable annuities is about 8 percent.

for training and qualification as sellers of equity based products. Thus, the full force of several hundred thousand insurance agents selling mutual funds is some years away at best.

Many companies have nonetheless expressed disappointment with the pace of the fund and variable annuity sales. As observed above, neither mutual funds founded by life insurers nor variable annuity policies have made much of an impact as yet. There are several explanations for these disappointing sales. Unreasonable expectations with regard to variable annuity sales may have been created by claims made during the public controversy on the subject. As observed above, there are regulatory obstacles and the market for individual annuities is specialized and therefore limited. In addition, the timing of the introduction of variable annuity products was not fortunate. Both fixed and variable annuities compete with direct investment media such as corporate and Government bonds. Because of the high bond yields prevailing in the late 1960's household savings tended to be diverted from financial intermediaries, such as the savings depositories and life insurance companies, into direct investment in securities. Although high bond yields ought to affect sales of fixed annuities more than sales of equity based variable annuities, the latter may also have been affected. Also mutual funds and variable annuities introduced toward the end of the decade faced an unfavorable selling climate in the form of an increasingly uncertain and bearish stock market.

No explanation of the recent success or probable future success of these products can be complete, however, without reference to agents' compensation schedules. Life insurance policies, annuity policies and mutual funds are all products for which there is agreement among firms who offer them that substantial selling effort is required. In this environment, salesmen's incentives are a major factor in determining which products are sold most energetically. Compensation schedules are often rather complex since compensation varies with the amount and specific type of product sold and the age of the policyholder among other things. Also, various fees and incentive bonuses may be paid in addition to the basic sales commission. Nonetheless, some rough comparison can be made among various products.

The traditional method of compensating agents for the sale of insurance and fixed annuity products is to pay the agent a high percentage of the first year's gross premium and smaller percentages of renewal premiums over five or ten years. Thus, for example, a regular full-time agent can typically expect to receive 75 to 80 percent of a year's premium on a whole life insurance policy issued at age 35 during the first two or three years that the policy is in force. Over five or six years his total commission will likely amount to 100 percent or better of an annual premium.⁹³ The compensation on a 20-year endowment policy issued at age 35 will typically be a somewhat smaller percentage of the annual premium, perhaps about 55 to 60 percent initially and 75 to 85 percent of a year's premium over several years.

⁹³ Based on responses of the larger life companies reporting to the Study's question 13.1 in Form I-52, Part B. The remaining compensation estimates on other products are from the same source. These are primarily companies doing business in New York state and therefore governed by New York statutory limitations on commissions and selling expense, which among other things limits first year commissions to 55 percent of a year's premium (N.Y. Ins. Law § 213(4) (McKinney Supp. 1969)). Some companies not limited by the New York or similar restrictions pay significantly higher first year commissions (e.g., over 100 percent of the annual premium).

The initial payment on a five-year renewable term policy issued at age 35 appears to run about 50 percent of the annual premium on the average, but over ten years the compensation expressed as a proportion of a year's premium may run close to 100 percent if the policy is renewed.

Agents are compensated for the sale of annual premium fixed annuity contracts on a basis similar to insurance policy compensation. In the case of such an individual fixed annuity contract issued at age 35 initial compensation typically amounts to about 20 to 35 percent of the annual consideration paid, and over several years to around 50 percent. Compensation schedules for variable annuities usually look more like mutual fund commission schedules. Thus, for example, for individuals with a total investment of less than \$10,000 an agent might receive somewhere between 5 and 20 percent of an annual payment in first year commissions on a periodic payment plan and perhaps accumulate 30 to 40 percent over several years.⁹⁴ Some insurers have reduced compensation paid on fixed annuity policies from the scales indicated above to that paid on equivalent variable annuities after the variable product was introduced. Single premium variable annuity commissions appear to run around 2 to 6 percent. On a mutual fund sale where the individual's total investment is less than \$10,000 an agent also may receive somewhere from 2 to 6 percent of the payment in commission. Few companies reported selling mutual funds on contractual plans.⁹⁵

While it is difficult to evaluate agents' incentives to sell various products without being able to quantify the differences in sales effort required relative to the size of the annual premium or other payment, the magnitude of the differences in compensation for standard life insurance products as opposed to individual annuities suggests that successful life insurance salesmen are likely to continue to emphasize life insurance more than annuities (fixed or variable) or mutual funds except where special tax considerations are present. Interviews with life insurance company officers confirm that this is a pervasive attitude among their more productive agents.

In response to the Study's inquiry with regard to changes in the compensation schedule applicable to individual variable annuities and mutual funds, eight insurers reported some modifications. These were evenly divided between changes in variable annuity compensation and that paid for mutual fund sales. The variable annuity revisions generally resulted in reductions in sales loads and in the amounts paid to agents although in one case the result was mixed as replacement of a schedule by a level percentage reduced commissions on smaller contracts but increased them on larger policies. The mutual

⁹⁴ For larger companies variable annuity commission scales appear to be more level over time than fixed annuity scales. Over 10 years the average per annum commission paid is about 5 percent.

⁹⁵ Under present law a contractual plan seller may deduct up to 50 percent of the first years payments, with the appropriate sales load over the life of the plan, if completed, not to exceed nine percent. (Investment Company Act of 1940, § 27(a)). The recently enacted Investment Company Amendments Act of 1970 provides that, effective June 14, 1971, periodic payment plan certificates issued by registered investment companies, if surrendered at any time within the first 18 months after issuance, must be redeemed for the value of the holder's account plus "an amount . . . equal to that part of the excess paid for sales loading which is over 15 per centum of the gross payments made by the certificate holder." As an alternative to the above provision, a company may choose to limit sales loads to a maximum of 9 percent of total payments, and no more than 20 percent of any single payment and an average of no more than 16 percent of the first 48 monthly payments. (*id.*, § 27(d), (g) and (h)).

fund revisions were all in the direction of increasing compensation to salesmen, generally "in order to be competitive." In one case this was accompanied by a sizable increase in sales charges with the dealer commission remaining a fixed percentage of the sales charge.⁹⁶ In another instance, additional compensation was paid through introduction of an incentive production plan under which agents can receive bonuses amounting up to an additional 20 percent on commissions paid for the sale of the insurer's own funds, the bonus being paid annually and higher percentage bonuses being paid for larger annual sales totals. Thus, for this small number of cases, insurers seemed to be attempting to stimulate variable annuity sales by reducing loads (bringing them closer to mutual fund loads) and thereby lowering agents' commissions while trying to improve mutual fund sales by increasing commissions payable to salesmen.

3. Variable Life Insurance

The term "variable life insurance" has not as yet acquired a commonly agreed-upon meaning. It is sometimes used to encompass any life insurance policy which provides for variable premiums and/or benefits. More narrowly, the term is sometimes limited to policies under which premiums and/or benefits vary solely in accordance with the investment experience of a separate account. The latter definition excludes policies in which any variability is determined by a price, wage, interest rate or other index or by a stipulated formula. "Variable life insurance" will be used here in the more narrow sense, and the other policies will be referred to as index or formula contracts.

The Study found no instances of variable life insurance contracts being offered in the United States although it is known that such policies are sold in Canada, England and Holland. Two Canadian companies in the Study sample, as well as one Canadian subsidiary of a U.S. respondent, reported offering variable life policies. In addition, eight respondents indicated that index or formula plan life insurance contracts were being offered.

Most of these contracts are relatively new as indicated by the fact that these companies reported only \$34.5 million of variable life insurance in force with policy reserves of just \$500,000.⁹⁷ Less than 3,000 individual index and formula contracts were reported with policy reserves of only about \$730,000.⁹⁸

Of the eight insurers selling index or formula contracts, six offered cost of living policies or cost of living riders or supplemental agreements attached to permanent life insurance. Basically, these plans simply permit the insured to purchase additional insurance, usually one-year term insurance, without evidence of insurability, in amounts

⁹⁶ Under recent amendments to the Investment Company Act of 1940, it is intended that the National Association of Securities Dealers ("NASD") shall make rules prohibiting its members, and nonmembers electing to comply with such rules, from charging any "excessive" sales load, subject to Commission authority to alter or supplement such rules. In addition, the Act allows the Commission to make similar rules for non-member underwriters not electing to comply with NASD rules. (Investment Company Act of 1940, § 22(b)). Section 2(a)(38) of the Act defines underwriter for these purposes.

⁹⁷ This represented something over 4,000 individual contracts. No offerings of group variable insurance were reported.

⁹⁸ There were no group contracts reported. Two companies failed to report the amount of life insurance in force under these contracts. The other six reported a combined total of \$41.8 million in force.

which will increase the death benefit in proportion to the increase in the Bureau of Labor Statistics Consumer Price Index ("CPI"). Normally this requires an additional (variable) premium payment each year, although some policies simply use the policy dividends to purchase additional paid-up insurance or term insurance depending upon the amount required to keep pace with the CPI.

One of the companies reported selling a policy with fixed benefits, but under which premiums vary inversely with the interest rate on long-term Treasury bonds. In the sample policy submitted the initial premium assumed a long-term Treasury bond yield of 4.75 to 5.25 percent. Yields above 5.25 percent reduced the premium; yields below 4.75 percent increased the premium.

Another company utilizes a formula plan under which the death benefit increases at a rate of three percent per year, compounded annually for a stipulated period of years. This guarantee is available either on a level premium or on an increasing premium plan. In the latter case, premiums increase at the same rate as benefits. None of the index or formula plans utilize a separate investment account.

Several types of variable life policies based on investment in equity accounts were submitted by the three Canadian insurers. These included whole life and endowment policies and participating and non-participating policies. In all policies the premiums were fixed and level, but benefits varied with the investment performance of the equity account. In most policies the policy reserve is invested partly in the insurer's regular general account and partly in the equity account. In some cases the allocation between the two accounts is fixed in the policy (for example, at 50 percent of the policy reserve in each); in other policies the policyholder elects, within limits, the allotment proportions (for example, in one set of policies the policyholder can elect a 25 percent, a 50 percent or a 75 percent interest in the equity account). In some, but not all, policies where there is a debt-equity investment mix, there is also a guarantee that the death benefit will never fall below the face amount of the policy. In one endowment policy where only an equity fund is employed, there is no guaranteed minimum benefit at death or at maturity.

Where policy loans are permitted, they are limited to that portion of the policy's cash value which is allotted to investment in the general account. The policyholder does ordinarily have the right to convert the policy into a regular (fixed) participating policy which will, of course, contain policy loan privileges.

In the endowment policy where all the investment risk is assumed by the policyholder, the cash value of the policy equals the value shown in a standard table plus (minus) the amount by which the total value of the policy's investment assets exceeds (is less than) the total amount applied to its purchase. The policy may be surrendered for its cash value at any time.

In policies where the insurer provides a partial investment guarantee, the cash value and policy reserve is increased or decreased each year according to the investment performance of the equity account. Only a total return in excess of the assumed rate of return on the guaranteed portion (in one case) or in excess of the net rate of return earned on general account assets the preceding year (in another case)

will result in an upward adjustment in the policy reserve and cash value.⁹⁹

Although U.S. companies are not yet offering variable life insurance policies, the concept seems to be widely accepted in the industry¹⁰⁰ and the ground work is being laid for such a product. The concept was approved by the National Association of Insurance Commissioners ("NAIC") at its December, 1969 meeting and the NAIC has adopted a model variable contract law and accompanying regulations. As of the middle of 1970, eight states, including New York, had specifically authorized, through statute or regulation, the sale of variable life insurance. It has been estimated that issuance of variable life insurance contracts is generally permissible in a dozen additional states.¹⁰¹ The Commission staff has recently begun discussions with a task force of the Subcommittee on Variable Contracts and Separate Accounts of the Joint Legislative Committee of the American Life Convention and the Life Insurance Association of America aimed at exploring the applicability of federal securities laws to variable life insurance.

Some clues regarding characteristics of variable life insurance policies favored by major U.S. insurers can be found in recent papers dealing with the design of variable contracts prepared by several New York Life Insurance Company actuaries.¹⁰² Two major features of policies likely to be offered are (1) a fixed level premium, and (2) a guaranteed minimum death benefit. It is contemplated that the entire reserve would be invested in an equity separate account. There would be a guarantee that the death benefit would never be less than the face amount of the policy, but the investment experience of the separate account would be reflected in possible increased death benefits above that minimum and in the cash surrender and nonforfeiture values. Those values will probably not be guaranteed as to dollar amount as in permanent fixed-benefit life insurance. It apparently is not feasible to guarantee that cash surrender values under a variable policy will never be less than under a corresponding fixed benefit policy.¹⁰³ Policy loans in the form used under fixed life insurance policies would probably not be used under these contracts.¹⁰⁴ The variable insurance statutory amendments which have been enacted would permit a wide variety of contractual features in such policies. However, at least in part for purposes of focusing upon the applica-

⁹⁹ Either one or the other of these stipulated rates of return is used depending on the insurer. The stipulated rate is the rate that must be earned to provide the cash value increase specified in the guaranteed portion of the contract. Total return falling short of the assumed (or actual general account) rate will, of course, reduce the reserve and cash value.

¹⁰⁰ Consequently, it appears that there will *not* be a repetition of the industry infighting which characterized the development of the variable annuity.

¹⁰¹ See the paper by Edwin M. Jones, "Variable Life Insurance—Significant Legislative, Legal, Tax and Planning Aspects" delivered before the Section of Insurance Negligence, and Compensation Law, American Bar Association Annual Meeting, St. Louis, August 10, 1970.

¹⁰² The seminal paper on which discussion appears to have been focused is John C. Fraser, Walter N. Miller and Charles M. Sternhell, "Analyses of Basic Actuarial Theory for Fixed Premium Variable Benefit Life Insurance," presented at the Annual Meeting of the Society of Actuaries, Boston, November 1969. Also see Charles M. Sternhell, "Talk on Variable Life Insurance" delivered at the American Bar Association Annual Meeting, St. Louis, August 10, 1970 ("Sternhell").

¹⁰³ See Sternhell, 15.

¹⁰⁴ The New York insurance law was amended to eliminate the requirement of a policy loan provision for variable policies. Policy loan provisions are permissible, however. See Edwin Jones paper, above note 101, at 7-8, for a discussion of the features such a provision might have to include. The Jones paper provides a convenient summary of the changes which were made in the New York statute to accommodate variable policies.

bility of federal securities laws, the industry is attempting through the American Life Convention-Life Insurance Association of America ("ALC-LIAA") task force to narrow the characteristics of contracts being considered.

For most life companies permanent individual life insurance policies continue to be their most important product and the biggest contributor to their asset growth. By comparison, individual annuity contracts, as seen above, have always been of distinctly secondary importance. Thus, it would not be appropriate to assume that the relatively unimpressive sales of individual variable annuity policies portends a similarly minor impact for variable life insurance. On the contrary, many observers in and out of the life insurance industry expect variable life insurance to be a very significant product, precisely because it permits some equity type benefits and risks to be reflected in the familiar context of cash value insurance policies. The ability to offer such policies on a traditional level premium basis and to include a minimum death benefit guarantee are considered especially valuable marketing features.

Consequently, of the individual equity based products discussed, variable life insurance seems, on the basis of present information, to be by far the most significant in terms of its potential impact upon insurers' investments in equities. Mutual fund assets do not, of course, represent assets of life insurance companies and in any case the funds created by insurers have yet to attain significant growth. Variable annuities have to date been responsible for only a negligible shift of insurer assets from debt to equity instruments. The major product development in recent years which has generated an increase in life insurers' investment in common equity securities has been equity funding of insured pension plans through separate accounts. The following section analyzes the life insurance industry's role in the competition for pension funds, the forces producing equity funding alternatives and the extent to which pension-benefit plans are using insurers for this purpose.

D. LIFE INSURANCE COMPANIES AS FUNDING AGENTS FOR PENSION-BENEFITS PLANS: THE GROUP ANNUITY BUSINESS

1. An Overview

Analysis of the competition for the management of funds generated by pension-benefit plans is important to a study of the impact of institutional investors on the capital markets for at least three reasons. First, pension funds are important because of their current size. At the end of 1969, assets of private noninsured pension funds amounted to \$97 billion, reserves of private pension plans funded with life insurance companies totaled \$38 billion and state and local government retirement systems had accumulated assets of \$51 billion.¹⁰⁵ These funds combined have grown over tenfold during the past two decades.

¹⁰⁵ Asset figures are from the Federal Reserve Board of Governors, *Flow of Funds*. Insured reserves are from the Institute of Life Insurance. There are, of course, additional assets in the Federal Civilian Employees, Railroad Retirement System and Old Age and Survivor Insurance programs.

Second, pension funds are important to the Study because of a pronounced trend toward investing an increasing proportion of their assets in equity securities.¹⁰⁶

Third, the prospects for continuing high growth rates in pension-benefit plan assets are favorable, and continuing shifts in the composition of these assets toward equity securities are probable, particularly for insured and state and local government plans.¹⁰⁷

The rapid growth of pension plans during the past 25 years is attributable to various economic and social pressures which resulted in the establishment of a legal framework which makes terms of pension plans subject to mandatory collective bargaining and a tax framework which offers substantial inducements to prefunding of pension plans so long as they meet minimum Internal Revenue Service standards.¹⁰⁸ The assets accumulated under pension-benefit plans are most often managed by bank trust departments and life insurers although some plan assets are internally managed and some investment advisory firms have succeeded in bringing significant amounts of pension funds under management in recent years. Some pension plans have chosen to split the assets generated by contributions among two or more funding agents. The choice of funding agent(s) is normally regarded as a major decision made in conjunction with the design of a pension plan, and sometimes for larger plans, with the advice of the employer's pension-benefit plan consulting firm. These consulting firms, variously known as consulting actuaries, employee benefit firms, insurance brokers or pension consultants, play a major role in the design of a plan and consequently affect employers' choice of an insured funding medium as opposed to a bank trustee or other funding mechanism.

Contemporary pension-benefit plans are quite complex instruments which require the services of many technical experts including actuaries and accountants and a great deal of administration and record-keeping. Funding agents are sometimes employed strictly as investment managers, but often also supply other services needed by the plan.

This section analyzes the types of services supplied by life insurers including particularly their investment management services, the successes and failures of insurers in the competition for the privilege of managing pension monies, and the process of growth in this phase of insurers' business. The development of special separate equity investment accounts designed to serve pension-benefit plans is described as a key factor among several life insurance company responses to an unfavorable competitive position vis-a-vis banks and other investment managers. As a result of the creation of these separate accounts and increased flexibility in insured contracts, innovation in the method of crediting investment return to contracts and favorable changes in the tax statutes, life insurers are currently in a much more competitive position with respect to relatively large pension-benefit plan cases than was true during the 1950's and early 1960's. The explanation of these developments begins with an examination of the characteristics of traditional insured contracts.

¹⁰⁶ See ch. III.2 and ch. VIII C. D. and E.

¹⁰⁷ Many of the larger noninsured private plans are already heavily invested in equities. The movement toward equities in insured plans and in state and local government retirement systems is relatively recent and large-scale shifts are still possible.

¹⁰⁸ See ch. VIII.B.4.a, for the IRS qualification rules and procedures.

2. Insured Pension-Benefit Plan Contracts

a. General characteristics

Historically, life insurance company contracts were distinguished by the various guarantees contained therein, and insurers stressed the value of these guarantees in the process of soliciting pension business. For a price which is included in the premiums or considerations required to achieve a specific set of plan objectives, an insurer will provide guarantees that cover preservation of principal, minimum investment return, premiums at which annuities for eligible employees can be purchased, life income or income of a given amount for a specified period for retired employees or other beneficiaries and actuarial, administrative and other expenses. Thus, insurance companies are prepared to assume all investment, mortality and expense risks which otherwise would be borne by the employer and/or the plan participants. Although these features apparently remain attractive to many smaller employers, during the late 1940's and 1950's many employers became disenchanted with the traditional group annuity approach to funding their retirement plans and reduced their contributions to insured contracts, or where possible, terminated such contracts. This phenomenon appears to have been induced by multiple causes, but a basic reason was that larger employers in particular came to doubt the value of annuity contract guarantees compared to their cost. The costs objected to included contractual features which tended to be a byproduct of the guarantees and had the effect of locking employers in an inflexible position.

Flexibility in pension plan design can encompass a number of different elements. Employers may seek flexibility in the amount and timing of plan contributions. Within limits the timing and size of contributions to a trustee (noninsured) pension plan can be adjusted to the firm's current financial position. For a plan funded on a sound actuarial basis the sum of the present value of future contributions and the existing assets must be equal to the present value of future liabilities. The determination of the present values of future contributions and liabilities involves a host of actuarial assumptions concerning future investment return, mortality, plan expenses, the number of employees acquiring benefit rights, the number delaying retirement, etc.¹⁰⁹ Employers utilizing a trustee plan may, in conjunction with their pension consultants, choose assumptions which are substantially more optimistic than those recommended by insurers with a consequent reduction in the contributions required to achieve a target level of benefits, at least until unfavorable experience necessitates increased contributions.

Flexibility may also have to do with the timing and manner in which benefit levels are computed, and the mechanism by which benefits are paid. In many instances, flexibility is viewed in terms of the employer's ability to adapt investment policy to the needs of the plan and his ability to shift plan assets among funding media quickly and without penalty. As interest rates rose during the 1950's from depression and wartime lows, and inflation and collective bargaining results placed increasing pressure upon employers, a more

¹⁰⁹ The current asset value also involves assumptions implicit in the valuation method utilized.

acute investment consciousness developed. For reasons set forth below, (sec. 3.b.), life insurers suffered competitively in this environment relative to bank trust departments and other funding agents.

b. Types of insured contracts

All funding instruments can be classified as to whether they are (1) allocated, or (2) unallocated instruments. One form of allocated instrument currently "allocates" plan contributions to purchase insurance or annuity contracts for the individual participants. Unallocated funding characterizes arrangements where contributions are accumulated in an undivided fund which ultimately will be used as a direct source of funds from which benefit payments are made or annuities purchased for eligible employees at retirement or prior termination of employment.¹¹⁰ Allocated instruments offered by life insurers include individual insurance and annuity contracts, group permanent insurance and the most common allocated instrument, the group deferred annuity contract.

Under a group deferred annuity contract benefits are normally provided through the annual purchase for each participant of a paid-up deferred life annuity. Past service benefits may be purchased. This is usually done on a periodic basis after the plan is placed in force. The premium rate at which annuities can be purchased is generally guaranteed for five years. Premiums are based on mortality, interest and expenses including provision for contingencies and, in a stock company, for profit.

For employers who are seeking flexibility in plan provisions, funding procedures or investment policy, allocated funding instruments will not be attractive. Unallocated funding instruments offered by insurers are called deposit administration contracts. Under this arrangement, annuities are purchased for plan participants, if at all, only at retirement or upon termination of employment with vested rights. Funds are accumulated on actuarial principles selected by the employer in a manner similar to a trustee plan. However, the employer or plan trustees may avail themselves of interest, principal, premium rate or other guarantees used by the insurer, or they may elect little or nothing in the way of guarantees.¹¹¹

Under deposit administration contracts, contributions are not made according to a predetermined fixed schedule, but are adjusted in accordance with the plan's experience. The employer is responsible for maintenance of an adequate fund. Benefits can be flexibly determined, for example, they need not be restricted to a formula that requires the purchase of a unit of benefit or the application of a specific purchase price in each year of service as in group deferred annuities. Although deposit administration contracts usually assume benefits will be paid in accordance with a specific annuity form—normally life annuity—the formula and the mechanism of payment is flexible.

¹¹⁰ See Dan M. McGill, *Fundamentals of Private Pensions*, (2ed. 1964) ("McGill") for a description of the various associated funding (ch. V) and unallocated funding (ch. VI) instruments.

¹¹¹ Minimum guarantees are often required under state insurance law but insurers write contracts to provide as little as possible (consistent with statutory or regulatory rules), in the way of guarantees or annuity options if the customer so desires.

Under the "direct rated" or "immediate participation guarantee" ("IPG") form of deposit administration contract a plan's current mortality, investment and expense experience is immediately recognized in the plan's experience and the employer's contribution is adjusted accordingly. In these arrangements there is no separation of the fund between active and retired lives for experience rating purposes.

In recent years a number of insurers have directed special attention to the so-called "tax sheltered" or "tax deferred" annuity field, which encompasses group contracts issued to employers eligible under Section 403(b) of the Internal Revenue Code. Such employers include public school systems and charitable organizations qualifying under Section 501(c)(3) of the Code.¹¹² Also receiving considerable attention are the so-called "H.R. 10 plans" established in accordance with the Self-Employed Individuals Tax Retirement Act.¹¹³ These markets have been regarded by many companies as the major potential sources of demand for group variable annuity contracts. The 403(b) area is apparently considered particularly attractive.¹¹⁴

3. Life Insurers and the Competition for Management of Pension-Benefit Plan Assets

a. Postwar trends

In the early post World War II period, at the point when collective bargaining agreements began to play a major role in pension plan design, private pension plan funding was split about equally between insured contracts on the one hand and various trustee arrangements on the other. Subsequently life insurers fell behind noninsured funding arrangements in the competition for management of pension plan assets. This experience is depicted in Table VI-11 which shows the flow of savings through insured pension plans as contrasted to savings generated by the growth of private noninsured plans and state and local government retirement systems.¹¹⁵

These data show a steady deterioration in the share of savings through pension plans which flowed to insurance companies during the 1950's and at least to the mid-1960's. Table VI-12 summarizes these savings figures for insured and private noninsured plans in percentage terms and breaks out the last five years individually. There is some indication in these figures that by the late 1960's, insurance companies may at least have succeeded in preventing further erosion in their share of savings through pension plans.

¹¹² As originally enacted, § 403(b) of the Code provided that if an organization qualifying under § 501(c)(3) purchased a nonforfeitable annuity contract for an employee, the employee would not be taxed in the year of contribution even though the plan under which the contract was purchased did not qualify under § 401(a). In 1958, § 403(b) was amended to limit the amount of employer contribution on which tax could be deferred. In 1961 the section was amended to extend to public school employees the same tax benefits enjoyed by employees of § 501(c)(3) organizations.

¹¹³ Pub. L. No. 87-792, 796 Stat. 809 (1962).

¹¹⁴ See Paul A. Campbell, *The Variable Annuity*, 52-53 (Connecticut General Life Insurance Company, 1969).

¹¹⁵ Some state and local retirement systems are funded through insurers but data on the division of these funds between various funding media are not available over time. See ch. VII.E.1.a for a breakdown of assets of the largest systems by manager type.

Table VI-11

Saving Through Various Pension Funds
1946 - 1969
(billions of dollars)

Period	Insured Pension Reserves	Private Noninsured Pension Reserves	State and Local Government Pension Reserves
1946-1949	\$ 2.1	\$ 2.3	\$ 1.5
1950-1954	\$ 5.2	\$ 8.7	\$ 5.2
1955-1959	\$ 7.6	\$15.0	\$ 7.8
1960-1964	\$ 7.8	\$21.6	\$12.5
1965-1969	\$12.7	\$31.0	\$21.2

Note: Saving is estimated as equal to changes in reserves of plans administered by life insurance companies (column 1) and net acquisition of financial assets by private noninsured and state and local government retirement funds.

Source: Board of Governors of the Federal Reserve System, Flow of Funds Accounts

Table VI-12

Saving Through
Insured and Private Noninsured
Pension-Benefit Plans

Period	(1) Insured Pension Reserves (\$billions)	(2) Private Non-Insured Pension Reserves (\$billions)	(3) Total (\$billions)	(4) Column (1) Divided by Column (3) (percent)
1946-1949	\$2.1	\$2.3	\$4.4	47.7%
1950-1954	5.2	8.7	13.9	37.4
1955-1959	7.6	15.0	22.6	33.6
1960-1964	7.8	21.6	29.4	26.5
1965	2.1	5.6	7.7	27.3
1966	2.1	6.1	8.2	25.6
1967	2.6	6.7	9.3	28.0
1968	2.9	6.4	9.3	31.2
1969	3.0	6.2	9.2	32.6

Note: For the definition at savings, see Note to Table VI-11.

Source: Table VI-11 and Federal Reserve System,
Flow of Funds Accounts.

b. Explanations of the changing funding pattern

There were several factors contributing to the deterioration in life companies' share of pension fund business. One major cause undoubtedly was the inflexibility associated with group deferred annuity contracts. These include the restrictive features affecting contributions, benefits, contract termination and investment policy referred to above. As their losses of pension plan assets to banks and other managers accelerated, life companies respond by offering deposit administration contracts with a wider variety of options available. At the same time, employers with deferred annuity contracts began to seriously consider the deposit administration mechanism. The development of separate accounts made it possible for life insurers to offer investment accounts designed specifically for pension monies and to invest these funds to an essentially unlimited extent in equity securities.¹¹⁶

The authorization of separate accounts provided life companies with a means of offering equity funding to pension-benefit plans within the framework of state insurance laws. But the Commission took the view that the principles established in the *VALIC* and *Prudential* cases¹¹⁷ applied to separate accounts used to fund fixed-benefit contracts. Thus, such accounts were issuers of securities governed by the Securities Act of 1933 and the accounts themselves were governed by the Investment Company Act of 1940.

Lengthy discussions between insurers and the Commission ensued, resulting in the promulgation in 1963 of Rule 3c-3¹¹⁸ under the Investment Company Act and Rule 156¹¹⁹ under the Securities Act. The former went a long way toward providing exemptions from the Investment Company Act to tax qualified group annuity contracts, while the latter exempted such contracts from the registration and prospectus requirements of the Securities Act. But the Rule 3c-3 exemption was not available to plans permitting allocation of employee contributions to separate accounts, nor to plans permitting variable payouts. In 1964, the Rule was amended to permit the payment of variable amounts.¹²⁰

For approximately the next five years, most companies wishing to do business not meeting the requirements for exemption had to proceed by registering their separate accounts as investment companies and the interests therein as securities. The two exceptions to this requirement were companies that sought to offer group contracts for H.R. 10 plans and companies offering contracts giving employees an option between fixed and variable payouts at retirement. As to the H.R. 10 contracts, the Commission staff stated that it would take no action under the Investment Company Act as long as the Securities Act provisions were complied with. As to the companies offering "option" contracts, the staff initially took the position that such contracts did not prohibit

¹¹⁶ The first statutes authorizing separate accounts were enacted in 1959 in Connecticut and New Jersey; New York passed enabling legislation in 1962 and all states except North Dakota now permit separate accounts to be used with pension-benefit plans.

Prior to the creation of separate accounts no means existed for insurers to offer investment management tailored to pension-benefit plan needs. Although, insurers are severely restricted with respect to equity investment in their general investment fund, separate accounts are not restricted with regard to the proportion of assets invested in equities. See sec. F.3.b.

¹¹⁷ See the discussion of these cases in sec. C. above.

¹¹⁸ SEC Investment Company Act Release No. 3605 (Jan. 7, 1963).

¹¹⁹ SEC Securities Act Release No. 4627 (Aug. 1, 1963).

¹²⁰ SEC Investment Company Act Release No. 4007 (July 2, 1964).

allocation of employee contributions to the separate account, and therefore were not exempted by Rule 3c-3. But the staff issued "no-action" letters similar to those issued to companies offering H.R. 10 plans. In 1969, the Commission further exempted contracts funding qualified pension plan business, including H.R. 10 plans, whether or not employee money was allowed to be allocated to the separate account.¹²¹

The recently enacted Investment Company Amendments Act of 1970 (Pub. L. No. 91-547, December 14, 1970) provides statutory exemptions to various funding mechanisms of tax qualified pension-benefit plans. The history of federal regulation of insurance company separate accounts and the import of Public Law 91-547 are discussed in detail in chapter VIII.¹²²

As shown in Table VI-13, assets only began flowing into separate accounts in the mid-1960's. The critical events which made operation of separate accounts feasible were the New York state enabling legislation, enacted in 1962, capital gains tax exemption also obtained in 1962,¹²³ and the Commission's Rule 3c-3 promulgated in 1963. Since doubled every year up to 1969.¹²⁴

Another major difficulty faced by life companies during the 1950's and early 1960's was the uncompetitive rate of return which they could offer on new considerations received from the group annuity business. This was a major problem because it applied to pension plans which were satisfied with the fixed-income investment funding media, which was all life insurers were than able to provide.

TABLE VI-13.—ESTIMATED PENSION RESERVES FUNDED IN SEPARATE ACCOUNTS

(Millions of dollars)

<i>Year</i>	End year, 1964-1969	<i>Amount</i>
1964	-----	\$100
1965	-----	250
1966	-----	600
1967	-----	1,200
1968	-----	2,300
1969	-----	3,500

SOURCE : Institute of Life Insurance.

A combination of several factors was responsible for insurers' uncompetitive position. These factors included :

- (1) the method used by life companies to credit group annuity contracts with investment earnings;
- (2) the fact that interest rates were on a significantly upward trend after two decades of very low rates;
- (3) the fact that because life insurance companies have very long-term liabilities they have tended to invest in relatively long-term debt instruments; and
- (4) the fact that, as noted, the great flood of new money into pension plans occurred after 1950.

¹²¹ SEC Investment Company Release No. 5741 (Amended Rule 6e-1) and SEC Securities Act Release No. 4986 (Rule 156) (July 15, 1969).

¹²² ch. VIII B.8.b and c.

¹²³ See below notes 132 through 144 and accompanying text.

¹²⁴ See sec. E. dealing with separate accounts below. The failure of separate account assets to double in 1969 is attributable more to the decline in stock prices in that year than to a reduction in the rate of new funds brought into separate accounts. However, the growth rate does appear to have declined significantly in 1970.

Investment results are credited to a group annuity contract's experience record, sometimes referred to as an experience fund. This fund represents the accumulated record of premiums and deposits paid, investment earnings less expenses charged, and benefits and dividends paid. The amount available for dividends or credits is a function of the difference between the value of this experience fund and the actuarially determined value of the insurers' liabilities under the contract. The traditional method of crediting investment earnings was to use a single aggregate rate of portfolio return applicable to all group annuity contracts. Computation of this rate was not performed in a uniform manner among life companies but often some adjustments of the gross earnings rate were made, to reflect investment expenses, taxes and capital gains and losses.¹²⁵

The use of the average aggregate rate of return crediting method placed life companies in an increasingly untenable competitive position as interest rates continued to rise.¹²⁶ The average earnings rate on life company portfolios only gradually reflected rising interest rates since many debt securities and mortgage loans in life company portfolios had been acquired 10, 15, 20 or more years earlier and carried quite low contract yields. Borrowers obviously were seldom accelerating repayments on these loans. On the other hand, as seen above, a large proportion of pensions assets represented contributions of recent vintage and employers expected, and could obtain through use of noninsured funding agencies, reflection of the higher current rates in their fund results.

The only feasible means of dealing with this problem aside from establishment of separate accounts was to change the method of crediting investment return. Therefore, during the late 1950's insurers developed the "investment year method".¹²⁷ The objective of this method is to reflect the investment yields at which dollars were invested as they became available from net contributions and from turnover of assets generated by past contributions. Numerous varieties of the method are in use, but essentially funds received are credited with the net rate of return earned during the year in which they were received. Some formidable technical problems have to be solved in formulating such a method including the development of a system which properly allows for portfolio asset repayments and sales and the reinvestment of these funds at the yields then existing.¹²⁸

In principle, the investment year crediting method should reduce inequities among policyholders and contractholders if the method is applied to all lines of business and companies are restricted from

¹²⁵ Most companies recognized only realized gains and losses and often used a smoothing formula to spread any single year's results over several years.

¹²⁶ The problem under consideration is essentially a general account problem. Commingled separate accounts commonly use units of participation or similar devices which assure that the value of any participant's interest in the account reflects the timing of its contributions and withdrawals.

¹²⁷ Also known as "the select and ultimate method," "the investment generation method" and "the new money method."

¹²⁸ For technical expositions of the investment year method see William K. White, "The New Money Interest Rate Method for Group Insured Pension Plans" *The Journal of the American Society of Chartered Life Underwriters*, Vol. XIV at 70-158 (Spring 1970) and Edward A. Green, "The Case for Refinement on Methods of Allocating Investment Income," *Transactions of the Society of Actuaries*, Vol. XIII, at 52-308 (1961).

switching back and forth between crediting methods.¹²⁹ Older plans for which current contributions are a relatively small proportion of the accumulated fund would have been better off under the average rate of return system. However, such plans are the least likely to be removed from the funding insurance company. Thus, from a competitive point of view, adoption of an investment year crediting method made eminently good sense to most insurers and the companies most active in the group annuity field have adopted some variety of this formula.

The significance of its adoption has been accentuated by the continued general uptrend in interest rates through the 1960's. It is difficult to express the impact of use of the investment year method quantitatively because insurers vary widely in their treatment of such things as taxes, investment expenses, loan commitment fees, realized capital gains and losses, and unrealized capital gains and losses in computing their "new money" rate. However, it appears that during the 1960's use of the investment year crediting method generally produced rates of return one to two interest points higher than the group annuity composite rates that would have been credited in the absence of a "new money" rate.¹³⁰ It is certainly conceivable that much larger shifts of pension plan assets away from insurers would have occurred without adoption of the investment year method.¹³¹

A final element which affected life insurers' ability to compete for pension funds is taxation. The relevant taxes include federal taxation of investment income and state and local government taxation of premiums and investment income. The normal tax advantages to a qualified trustee plan include deductibility of employer contributions to the plan, the deferral of employee taxes on employer contributions made in their behalf until the time at which benefits are received and the tax deferral granted all investment earnings including capital gains on funds accumulated within the pension plan until they are reflected in benefit payments. Prior to the Life Insurance Company Income Tax Act of 1959,¹³² life insurance companies were taxed solely on investment income. No special recognition was allowed for that portion of companies' general account assets attributable to qualified pension plans. Consequently dividends or employer credits to insured group annuity contracts were based on investment earnings after

¹²⁹ In recognition of this problem some states have placed conditions on the use of such methods. An amendment to Regulation 33, promulgated by the New York Insurance Department effective January 1, 1962, required any company adopting the method to credit individual group annuity contracts, to also use it to allocate investment earnings *among* and *within* lines of business, to apply the method prospectively only and to use it for allocation of capital gains and losses. Reversion to an average rate of return method is permitted only within a plan approved by the Superintendent of Insurance and designed to make the conversion gradual. McGill above note 110 at 168-169.

¹³⁰ That is, for example, contracts were credited with a 6 or 7 percent yield instead of 5 percent. This is estimated on the basis of annual rates of return supplied by insurers in response to questionnaire Form I-51, question 17.

¹³¹ Of course, the aggregative average rate of return will look more attractive if yields move into a prolonged downtrend from their historic 1969-1970 peaks. Some insurers are offering (and advertising extensively) options on deposit administration contracts (including direct rated contracts) under which the employer's experience fund will be credited with the "new money" rate, unless the "new money" rate falls below a guaranteed rate (e.g. 7 percent) in which case the guaranteed rate will be credited. This sort of guarantee is generally good for a period of three to five years. Insurers' practice of committing investment funds many months and sometimes two or three years in advance at yields determined as of the commitment date makes such guarantees feasible.

¹³² Pub. L. 86-89, 73 Stat. 112.

taxes. This did constitute a competitive disadvantage, but since the tax rate applied to life companies' investment income was relatively low, the federal income tax inequity probably did not constitute as serious a competitive problem as did the factors discussed previously.

Specifically, during the 1950's life companies were taxed under stop-gap legislation, designed to collect some taxes from the companies while the Treasury, Congress and the industry were attempting to formulate a permanent tax act specifically applicable to life insurers. The Revenue Act of 1951 taxed life company investment income, net of allowable expenses, at a flat rate of 6.5 percent.¹³³ This Act remained in force via annual extensions through 1954. During 1955-1957, life companies were taxed at a 7.8 percent rate under the "Mills Bill."¹³⁴ This Act also broadened the tax base somewhat by expanding the definition of investment income¹³⁵ and by eliminating the 85 percent dividend deduction available to most taxpayers.

Beginning with the taxable year 1958, and continuing to the present, life companies have been taxed under the Life Insurance Company Income Tax Act of 1959.¹³⁶ This Act taxes underwriting gains as well as investment income and was intended to increase significantly the amount of tax revenues collected from life insurers. The Act (including 1962 amendments) does, however, exempt from federal income tax the investment earnings from the reserves of qualified pension and profit sharing plans. The only federal tax which is generated in this line of business arises from earnings attributable to (1) reserves for nonqualified plans and (2) surplus funds of the entire group annuity line. Since 1962 there do not appear to have been any federal tax inequities which have significantly affected insurers' ability to attract and retain group annuity business.

The Life Insurance Company Income Tax Act of 1959 imposes a tax on life insurance company taxable income at ordinary corporate rates.¹³⁷

Life insurance company taxable income is defined as the sum of the following:

(1) The company's taxable investment income (described below), or its gain from operations if the latter is less than its taxable investment income;

(2) An amount equal to 50 percent of any excess of gain from operations¹³⁸ over taxable investment income; and

(3) The amount subtracted from the policyholders' surplus account for the taxable year.¹³⁹

¹³³ Actually 3.5 percent on the first \$200,000 of net investment income and 6.5 percent on the remainder. Provisions were included for handling tax-exempt interest derived from state and local government obligations and for permitting the intercorporate dividend deduction.

¹³⁴ Pub. L. 84-429, 70 Stat. 56 (March 13, 1956). The actual tax rate was 3.75 percent on the first million dollars of net investment income and 7.8 percent on the remainder.

¹³⁵ Added to the income base were royalties, commitment fees, mortgage prepayment penalties and income from non-insurance business.

¹³⁶ Pub. L. 86-89, 73 Stat. 112. Generally, the Act was effective as to taxable years beginning after December 31, 1957.

¹³⁷ Int. Rev. Code of 1954, § 802(a). In the case of capital gains, an alternative tax is provided which is equivalent to the capital gains tax for ordinary corporations.

¹³⁸ Int. Rev. Code of 1954, § 802(a)(2).

¹³⁹ The gain from operations is based on the total income of the life insurance company, including its share of investment income, but since taxable investment income is handled separately, "gain from operations" relates mostly to underwriting income rather than investment income.

¹⁴⁰ Basically, this is the amount, determined under Int. Rev. Code of 1954, § 815, of previously untaxed underwriting income distributed in the taxable year to stockholders.

Taxable investment income is defined as an amount (not less than zero) equal to the excess of net long-term capital gain over net short-term capital loss plus the life insurance company's share of investment yield (described below), reduced by the sum of certain items, including the company's share of the 85 percent dividends received deduction.¹⁴⁰ The investment yield is determined by deducting investment and similar expenses from gross investment income, which includes the gross amount received from interest, rents, dividends and royalties; from the entering into of any interest, rent or royalty producing leases, mortgages or agreements; from any trade or business other than the insurance business; plus any excess of net short-term capital gain over net long-term capital loss.¹⁴¹ The policyholders' share of investment yield¹⁴² is excluded from taxable investment income.¹⁴³

The discussion above applies to life insurance companies' general accounts. The separate accounts are covered by special provisions. In essence the taxable income of a separate account is computed separately from the taxable income of a company's general account. The investment yield is separately computed and accounted for with respect to the various income, exclusion, deduction, asset, reserve and other liability items properly attributable to separate accounts. Like the investment yield of the general accounts, it is then reduced by taking various deductions, including the company's share of the 85 percent dividends received deduction, and the amount of taxable investment income is determined. Special provisions govern the determination of the policyholders' share of investment yield and thus, the ultimate determination of the amount of the taxable investment income. Since the policyholders' share of separate account investment yield is usually over 90 percent, the effective rate of tax paid at the insurance company level on what is left after taking the 85 percent dividends received deduction is minimal.

Since the policyholders' share accounts for most of the investment yield, short-term capital gain (part of a separate account's investment yield) is very nearly tax free at the insurance company level. Long-term capital gains of separate accounts funding nonqualified plans are subject to the normal corporate capital gains tax. To the extent that asset appreciation for separate accounts used to fund tax qualified plans has been reflected in reserves or other items used to calculate gain or loss from operations, there is no capital gains tax on the assets of such accounts.¹⁴⁴

State and local taxes remain in a few states, but there has been a marked trend away from premium taxes, and in most important states premium taxes specifically exclude from taxation premiums and considerations received on annuity contracts issued in conjunction with plans qualified under Section 401 of the Internal Revenue Code.

c. Insurers' view of their position in the competition for management of pension funds.

Insurance companies responding to the Study's questionnaire dealing with the group annuity business were provided an opportunity to

¹⁴⁰ Int. Rev. Code of 1954, § 804(a)(2).

¹⁴¹ Int. Rev. Code of 1954, § 804(b). All other capital gain is excluded from gross investment income.

¹⁴² As determined under Int. Rev. Code of 1954, § 804(a).

¹⁴³ Int. Rev. Code of 1954, § 804(a).

¹⁴⁴ For accounting purposes, tax qualified and non-tax qualified plans are often funded in different separate accounts.

evaluate the factors which affect the competition between insurers and bank trust departments for the management of assets of relatively large pension-benefit plans.¹⁴⁵ Their responses are relevant to the competitive environment as of the reporting date; that is, Spring 1970.

Insurers of all sizes regard their ability to offer a package of actuarial, administrative and investment services as the most important competitive advantage they hold over banks, which do not offer actuarial services in particular. Also of considerable importance to many companies is their ability to provide investment, mortality and other guarantees. These two factors constitute the means by which insurers have traditionally been able to differentiate the services they can provide pension plan customers from those obtainable from banks or other investment managers. In light of the discussion above which indicated that some large plans have turned away from many insurer guarantees and actuarial services in the past twenty years, it is not surprising to find that smaller companies appear to value these factors more highly than large companies. Nonetheless, they were cited as the two greatest competitive advantages by the preponderance of insurers of all sizes.

Aside from these services, the remaining factor most often mentioned as a significant competitive advantage was the ability of life insurers to offer related benefit programs such as group term insurance, disability income and medical coverage. Insurers who offer these products do appear to gain some advantage from them in terms of production of customers for the group annuity department. One reason for this is that active participation in these lines of business assists insurers in developing close relationships with insurance brokers who serve as pension consultants as well and are thereby sources of referral for pension business. In addition, some companies with substantial property and liability company affiliates indicated that these companies' agents and brokers are significant sources of group annuity business introductions.

It is also conceivable that insurers' large lending operations produce customers for the group annuity department. This would seem plausible because most life companies' acquisitions of debt obligations are private placements, so that close relationships are developed between insurers and corporate borrowers. However, these relationships were regarded as relatively unimportant by most responding insurers. Information presented in chapter XV provides some objective confirmation that the tie between loan customers and pension plan customers is not very strong.¹⁴⁶

One of the reasons that other business relationships with employers do not appear to insurers to be such important advantages in the competition for management of pension-benefit plan assets is that such relationships are not unique to insurers. Indeed, banks appear to have much stronger ties between the commercial and investment manage-

¹⁴⁵ See Study Questionnaire Form I-51, Questions 7 and 8.

¹⁴⁶ Results of a multivariate regression analysis reported in ch. XV actually show a negative relationship between insurer management of a corporation's pension plan and lending relationships with corporations. That is, for the sample utilized an insurer is less likely, other things equal, to be the manager of a corporation's pension plan if it is a creditor to that corporation. See ch. XV.D.

ment portions of their business.¹⁴⁷ Insurers of all sizes, but especially the larger companies which account for over 90 percent of the group annuity business, indicated that their greatest competitive disadvantage was the banks' ability to develop close relationships with funding employers through their deposit and loan business.

Almost as important a factor to many companies is banks' ability to establish closer relationships with pension consulting firms than insurers have succeeded in doing. Pension consultants, as observed above, play a major role in pension plan design and thereby in the selection of the type of funding agent (bank, insurer, etc.) if not the particular investment manager. Some of these consultants began their existence as insurance brokers, came to specialize in group life and health insurance when this business became significant and later added a pension plan specialty. Other firms were created specifically to specialize in pension counseling. As suggested above, life companies are more likely to obtain annuity referrals from the former type of firm. There are perhaps ten or twelve major firms equipped to do business over all or a large part of the nation. In addition, there are a great many regional firms.

In the early 1950's these firms began shifting their clients from insurers to banks primarily for the reasons discussed above; that is, insurer's contractual and investment inflexibility. In addition, there has existed a certain natural competition between insurers and consulting actuaries because of similarity in administrative and actuarial services offered. This contributes to the infrequent recommendation of insured vehicles by some consultants. Because of this, a number of companies indicated that although actuarial services are available to group annuity customers, these services are not actively marketed in the hope that if insurers allow consultants to handle actuarial details they can more reasonably expect referrals from these consultants.

One potential measure of the intensity of competition between insurers and bank trust departments or other investment managers is the frequency of "split-funding" of pension-benefit plans; that is, dividing the plan's assets among more than one manager. The next section provides some measure of the extent of split-funding and an appraisal of its usefulness as an indicator of competitive intensity.

d. The extent of split-funding

Employers may choose to allocate the funds accumulated in their employee retirement plans among two or more managers for several reasons. The rationale for this phenomenon which has been particularly stressed in recent years links the practice to an accentuated desire for investment performance. It is presumed that dividing the plan's funds into several accounts placed with competing managers will produce more aggressive and responsive management from each funding agent than could be expected if all funds were under single management. This sense of competitive grading of managers can be heightened by varying the allocation of net new plan contributions each year among managers in accordance with their

¹⁴⁷ In contrast to the results for insurance companies, the analysis in ch. XV shows a strong positive relationship for banks between management of a corporation's pension plan assets and the existence of a loan relationship with the corporation. See ch. XV.D.

respective investment results in the previous year. Furthermore, if any manager lags significantly behind the others in investment results produced over several years he may expect to lose future allocations or even the entire account.¹⁴⁸

There are several other possible explanations of split-funding. Administrators of large pension plans sometimes feel that the funds can be managed more flexibly and aggressively if they are managed in several accounts rather than one very large account. Having made that decision, it is a natural step to utilize several managers independent of any desire to place these managers in a competitive performance race.

Historically, a substantial number of split-funding arrangements came into being as employers diverted contributions away from insurance companies during the 1950's for reasons described above. Frequently, an insured contract remained, sometimes involuntarily because the contract did not permit withdrawal of all, or any portion, of the funds.¹⁴⁹

Since the advent of the investment year crediting method some employers have voluntarily split-funded, using a bank or other manager for the equity portfolio and utilizing an insurer in order to obtain desired guarantees and management (in the general account) of the fixed income portion of the portfolio.

Finally, part of the inducement to split-fund may simply reflect a corporate desire to cement banking and insurance relationships by providing both institutions with a share of the corporate pension funds to manage.

Because there are a number of factors which can motivate employers to split-fund, the existence of this practice cannot be assumed to reflect a desire to place managers in a competitive performance race. Nonetheless, knowledge of the extent of the split-funding practice is useful in appraising the competitive environment. In order to obtain some measure of the extent of this phenomenon and the extent to which insurers are conscious of the practice when it occurs with their large customers, respondent companies were asked to supply information on: (1) the number of their 25 largest plans which they knew to be split-funded, and (2) the identity of the other funding agents involved, categorized by institutional type. For this purpose, split-funding was defined to include any situation where a plan's funds were divided among more than one manager regardless of whether the other managers were insurance companies, banks, investment advisory firms or an investment department internalized within the funding employer. Specifically, insurers were asked to report on the 25 plans represented in the largest group annuity contracts active as of the end of 1969.¹⁵⁰ In responding to this question, insurers were requested not to check the factual information with clients but to respond with regard to the

¹⁴⁸ See ch. VIII.C.1 for a summary of changes in plan managers made in recent years by the largest pension-benefit plans.

¹⁴⁹ See the discussion of withdrawal provisions below in sec. 4.d.(3).

¹⁵⁰ Respondents were referred to their reporting, in Form I-51, Table 1, to determine the largest plans. The universe of plans is limited to those group deferred annuity and deposit administration contracts for which the insurer served as funding agent on December 31, 1969, and received new contributions at some time during 1968-1969. Individual policy pension contracts, group permanent contracts, H.R. 10 and 403(b) plan contracts were excluded.

information available to knowledgeable persons in their companies.¹⁵¹ These responses are summarized by respondent groups¹⁵² in Tables VI-14 and VI-15. On the whole, the replies suggest a high degree of consciousness on the part of insurers with respect to the existence of split-funding. In some instances, however, although respondents reported reasonably certain knowledge that split-funding was practiced by a plan, they were unaware of the identity or type of the other managing institutions. One large (Group I) company declined to supply any information on this issue because of the uncertain accuracy of the knowledge possessed by the company's officers.¹⁵³

Discussion with group annuity personnel in the respondent companies indicated that information on split-funding frequently was provided the company by customers or the customers' pension consultants. Contacts with competing managers are another source, and some information comes from various unrelated parties. As would be expected from the multiple explanations of split-funding, employers vary in the extent to which they inform funding insurers of their split-funding policy. Employers who wish managers to compete aggressively against each other inform the managing firms of the identity of the other players and the rules under which the race is being run. Investment performance reports on each manager, which may be prepared by the employer's pension consultant or by brokers who provide this service in return for designated brokerage, are circulated to all managers. At the other extreme there were instances reported of clients who deliberately attempted to ensure that the insurance company remained unaware of any other managers, on the theory that consciously competing managers were likely to be diverted from producing good long-run investment results.

¹⁵¹ This means that the data reported in Tables VI-14 and VI-15 below contain a possibly significant subjective element and sometimes imperfect coverage of the knowledge existing in the company. Knowledge regarding split-funding may be spread among a substantial number of individuals in larger insurance companies, it may have been derived from many and various sources of differing reliability and it may be dated and consequently no longer accurate.

¹⁵² Responding insurers are grouped according to the magnitude of their group annuity reserves as described in the note to Table VI-14. Those groups differ from those used in sec. C. Five respondents to the Form I-51 questionnaire are excluded from the tables including one Group I insurer which declined to respond (see the remainder of the textual paragraph) and four Group IV companies who were commercially inactive in the group annuity business.

¹⁵³ A company representative indicated that they probably had solid knowledge of the facts regarding split-funding with respect to a quarter of their pension cases, no knowledge of any reliability with respect to a quarter and some uncertain, often outdated, knowledge with respect to the other half.

Table VI-14

Proportion of Major Pension Plans
Funded With Respondent Insurers
Which Are Split-Funded
By Respondent Group
as of 12/31/69

Respondent Group	(1) Numbers of Plans Being Reported On	(2) Numbers of Split- Funded Plans	Ratio: Column (2) Divided by Column (1) (percent)
I	125	76	61%
II	100	39	39
III	125	28	22
IV	503	72	14
All Respondents	853	215	25

Note: Respondent Group I represents 5 companies with group annuity reserves in excess of \$2.5 billion as of 12/31/69; Group II contains 4 companies with reserves in excess of \$500 million but less than \$1.5 billion; Group III consists of 5 issuers with reserves between \$200 million and \$500 million and Group IV consists of 21 respondents with group annuity reserves amounting to less than \$200 million

Source: Responses to Questionnaire Form I-51, Question 9.1.

TABLE VI-15

Number of Competing Funding Institutions
Managing Split-Funded Plans by
Institution Type and by
Respondent Group

<u>Respondent Group</u>	<u>Other Insurance Companies</u>	<u>Banks</u>	<u>Investment Advisory Firms</u>	<u>Self Administered Accounts</u>	<u>Total</u>
I	42	57	6	3	108
II	9	26	5	0	40
III	3	25	0	0	28
IV	29	34	0	7	70
All Respondents	83	142	11	10	246

Note: Respondents are the same as those reported in Table VI-14.

Source: Replies to Questionnaire Form I-51, Question 9.2.

Table VI-14 shows that 25 percent of the plans reported on by the respondent insurers were known by them to be split-funded. As expected, this percentage is highest for the largest respondents and declines with respondents' size (measured by group annuity reserves). Despite the increased awareness of split-funding in recent years, the 61 percent figure for Group I respondents is surprisingly high. Since Group I companies account for nearly 80 percent of existing group annuity business, this figure probably does reflect the success realized by banks during a substantial portion of the postwar period in diverting at least part of the larger plans' assets away from insurers.

As footnote 152 explains, in addition to the one Group I nonrespondent to this question, four Group IV companies were dropped because their business was essentially limited to plans covering their employees or employees of affiliated companies, or, in one instance, because the company had withdrawn from the group annuity business.¹⁵⁴ In addition, three other Group IV companies which are represented in these tables had less than 25 contracts outstanding as of year-end 1969.¹⁵⁵

Since respondents were indicating the existence of split-funding only where they had knowledge of its existence, there is undoubtedly some degree of under-reporting in Table VI-14. In Table VI-15, the numbers of funding managers involved in these split-funding situations are identified by institution type and by respondent group. Here there is certainly some under-reporting, since several companies were not able to identify by type any of the competing managers for plans which they reported as being split-funded. This is reflected for example in the Group IV line of Table VI-15 where a total of 70 other funding agents is reported although Table VI-14 shows 72 split-funded plans in this group.¹⁵⁶ In reporting these other funding agents the respondents were told to count, and identify by type, where known, each competing funding agent for each split-funded plan. Thus, a given bank or insurer was counted each time it appeared as a funding agent. Despite some under-reporting, the 215 split-funded plans reported in Table VI-14 produced 246 competing funding agents in Table VI-15. Nearly 60 percent of these were banks and most of the remainder other insurance companies.¹⁵⁷ Curiously, banks represent a higher proportion of competing managers for the Group II and III respondents than for the largest (Group I) companies. Apparently the Group I companies have a number of large cases which are split with other companies represented in Group I. As would be expected, Group I companies re-

¹⁵⁴ That is, it was accepting no new business although still servicing cases which remained on its books.

¹⁵⁵ Twenty-one Group IV companies are being reported. Since three had fewer than 25 plans the total number of plans reported on (503) is less than the 525 which would be expected if each respondent had at least 25 plans to report.

¹⁵⁶ Since some plans have more than one funding agent in addition to the responding insurer, the under-reporting involved is something greater than two managers.

¹⁵⁷ Most of these companies must, of course, be respondents to Form I-51 since these respondents account for most of the outstanding group annuity business. By the same token, some plans are probably being counted more than once.

port more situations than smaller insurers where more than one competing funding agent exists.

4. Recent Growth and Change in the Composition and Character of the Group Annuity Business

a. An overview

This section analyzes in a more quantitative and specific manner the changes which have occurred in the group annuity business during recent years. Emphasis is placed on documenting (1) the growth of and broad shifts in the types of contracts outstanding, (2) specific changes in the character of insured contract provisions dealing with transfer of plan assets to other funding agents, (3) contract features and services available from insurers and the methods of assessing the cost of these services, (4) mechanisms provided for making benefit payments, and (5) growth in the use of equity funding through insurers. The dynamics of the growth process itself are analyzed by separating out that portion of growth which is attributable to the attraction of new customers net of losses attributable to customer terminations. As a part of this analysis it is possible to obtain some insight into the quantitative significance of various alternative sources of new business and of the reasons for significant reductions and terminations of business.

b. Growth and change in types of contracts utilized: 1950-1969

Tables VI-16 and VI-17 depict the broad pattern of change of types of insured contracts outstanding over the period 1950 to 1969. The most dramatic change evident in these tables is the increase in the more flexible deposit administration contracts at the expense of deferred annuities.¹⁵⁸

¹⁵⁸ Combination contracts are placed in the category to which the greater portion of reserves are attributable.

TABLE VI-16

**Reserves for Pension Benefit Plans Funded With Life Insurance
Companies by Type of Contract
Selected Years (End-Year)
(\$millions)**

Type of Contract	Deferred Annuity	Deposit Administration	Individual Policy Pension Trusts	Other Plans	Total
Year					
1950	\$ 4,125	\$ 225	\$ 700	\$ 550	\$ 5,600
1955	\$ 7,925	\$ 1,075	\$1,400	\$ 925	\$11,325
1960	\$11,675	\$ 3,375	\$2,175	\$1,625	\$18,850
1965	\$14,225	\$ 7,950	\$2,550	\$2,625	\$27,350
1969	\$12,850	\$18,275	\$3,525	\$3,250	\$37,900

Note: "Other Plans" include Group Permanent Policies, Group Individual H.R. 10 and 403(b) ("Tax Sheltered Annuity") plans and others unspecified types of plans.

Source: Institute of Life Insurance

TABLE VI-17

Payments Made Into Insured Pension-Benefit Plans Funded With Life Insurance
Companies by Type of Contract
During Selected Years
(\$millions)

Type of Contract	Deferred Annuity	Deposit Administration	Individual Policy Pension Trusts	Other Plans	Total
Year					
1950	\$640	\$ 50	\$170	\$ 75	\$ 935
1955	\$845	\$ 220	\$250	\$110	\$1,425
1960	\$695	\$ 415	\$315	\$190	\$1,615
1965	\$850	\$ 905	\$365	\$275	\$2,395
1969	\$750	\$2,000	\$630	\$470	\$3,850

Note: See Table VI-16 for a description of "other plans."

Source: Institute of Life Insurance

This shift is particularly spectacular during the most recent period (that is since 1965). The growth in deposit administration contracts occurred, of course, as a result of substantial shifts of reserves in existing contracts from the deferred annuity to the deposit administration form¹⁵⁹ as well as from growth of existing deposit administration contracts and attraction of new deposit administration customers.

The individual policy pension trusts¹⁶⁰ shown in Tables VI-16 and VI-17 represent plans, normally used for small groups, which are administered by trustees who are empowered to purchase individual whole life, endowment or annuity contracts for each plan participant. Only plans providing for retirement income are included in these tables. As the "Note" to Table VI-16 explains the "other plans" category includes those Group Permanent contracts which provide for income at retirement, individual and group H.R. 10 plan contracts and contracts with 403(b) "tax sheltered" plans among others.

Tables VI-18, VI-19 and VI-20 display annually for the years 1965 to 1969 reserves, premiums and considerations paid insurers and pension benefit payments made by insurers by type of contract. Examination of Table VI-18 shows that deferred annuity reserves peaked in 1967 and discloses that remarkable growth in deposit administration contract reserves took place during 1968 and 1969. These events are obviously closely related. A similar change in the relative importance of these two contractual forms is reflected in the record of payments made to insurers and pension payments made by insurers for deferred annuity relative to deposit administration contracts. (Tables VI-19 and VI-20)

In recent years many insurers have cultivated the relatively new markets established by (1) the Self-Employed Individuals Tax Retirement Act, and (2) section 403(b) of the Internal Revenue Code.¹⁶¹ Recent growth in insured contracts issued to self-employed individuals and groups is shown in terms of reserves and annual premiums in Table VI-21. Comparable time series data are not available for the 403(b) tax deferred annuity contracts but as of year-end 1969 these contracts had reserves of \$525 million and made premium payments of \$160 million during 1969.¹⁶²

c. Concentration in the group annuity business

As was observed in section B above, the concentration of business among a few large companies is greater in the group annuity line

¹⁵⁹ There are probably few large plans which remain entirely funded on a deferred annuity basis.

¹⁶⁰ Including profit-sharing trusts.

¹⁶¹ See sec. C.2.e above with respect to this development in individual variable annuity contracts.

¹⁶² Data from the Institute of Life Insurance ("ILI"). Neither H.R. 10 plan, nor 403(b) annuity contracts are shown separately in Tables VI-18, VI-19 and VI-20. The H.R. 10 contracts are included in the "individual policy pension trust" and "other" categories. Data on the 403(b) contracts are also included in these two categories, but some are apparently included in the group annuity categories. The ILI has reported revised data for 1969 showing H.R. 10 and "tax sheltered" contracts separately. This results in some modest reduction in amounts shown in the deferred annuity, deposit administration, individual policy pension trusts and group permanent categories from the figures appearing in Tables VI-18, VI-19 and VI-20.

that in other lines of business.¹⁶³ The extent of this concentration is depicted in Tables VI-22, VI-23 and VI-24 where, for 1969, group annuity reserves, annual premiums and considerations and pension benefits paid are shown for the entire industry and for each of our sample respondent groups.¹⁶⁴ For greater ease of interpretation, these dollar figures are expressed as ratios of each respondent group to the sample totals and to the universe (industry) totals in Tables VI-25, VI-26 and VI-27.

The existence of substantial concentration permits the Study sample of 40 companies to approximate a census of the industry. Thus, the sample companies account for 96 percent of industry group annuity reserves, 95 percent of annual contributions paid in and 97 percent of benefits paid out.¹⁶⁵ Group annuity contracts for this calculation are limited to the major deferred annuity and deposit administration varieties. The coverage of remaining types of insured pension contracts appears to be less inclusive in Tables VI-25, VI-26 and VI-27.¹⁶⁶

¹⁶³ Table VI-1 above shows that three insurers account for half of all group deferred annuity and deposit administration contract reserves. Other portions of group business are also relatively concentrated. Seven insurers account for 50 percent of group life insurance in force and seven account for 55 percent of group accident and health premium income. The latter two estimates were provided by one of the respondent insurance companies.

¹⁶⁴ The respondent groupings are the same as those identified in Table VI-14. Each of the six Group I insurers had group annuity reserves in excess of \$2.5 billion as of December 31, 1969. At the same date, the four Group II companies had group annuity reserves in excess of \$500 million, but less than \$1.5 billion; Group III consists of five insurers having such reserves in excess of \$200 million, but less than \$500 million and Group IV contains 25 companies with group annuity reserves of less than \$200 million.

¹⁶⁵ For a description of the sample selection process, see app. VI.A.

¹⁶⁶ The data on remaining contracts is less reliable, particularly for contributions and benefit payments because of reporting gaps in the individual company survey filings. The most complete reporting was for reserves. According to these data, the 40 company sample accounted for about 75 percent of reserves in the residual contract categories.

TABLE VI-18

Reserves for Pension-Benefit Plans Funded With Life Insurance Companies
 By Type of Contract
 Year End: 1965 - 1969
 (Millions of dollars)

Plan	Year				
	1965	1966	1967	1968	1969
Group Annuity Deferred Annuity	\$14,225	\$14,650	\$14,750	\$13,925	\$12,850
Deposit Administration Group Annuity	\$ 7,950	\$ 9,325	\$11,350	\$14,450	\$18,275
Individual Policy Pension Trust	\$ 2,550	\$ 2,750	\$ 2,950	\$ 3,325	\$ 3,525
Group Permanent	\$ 750	\$ 775	\$ 800	\$ 775	\$ 800
Other	\$ 1,875	\$ 1,950	\$ 2,200	\$ 2,500	\$ 2,450
TOTAL - All Plans	\$27,350	\$29,450	\$32,050	\$34,975	\$37,900

Source: Institute of Life Insurance

Table VI-19

Premiums and Considerations Paid by Pension-Benefit Funded With Life Insurance Companies
 By Type of Contract
 Insured Pension Plans
 Annual Data: 1965 - 1969
 (Millions of dollars)

Plan	Year				
	1965	1966	1967	1968	1969
Group Annuity Deferred Annuity	\$ 850	\$ 740	\$ 755	\$ 735	\$ 750
Deposit Administration Group Annuity	\$ 905	\$ 1,095	\$ 1,255	\$ 1,525	\$ 2,000
Individual Policy Pension Trust	\$ 365	\$ 400	\$ 475	\$ 540	\$ 630
Group Permanent	\$ 100	\$ 110	\$ 105	\$ 60	\$ 105
Other	\$ 175	\$ 200	\$ 230	\$ 290	\$ 365
TOTAL - All Plans	\$ 2,395	\$ 2,545	\$ 2,820	\$ 3,150	\$ 3,850

Source: Institute of Life Insurance

TABLE VI-20

Amount of Pensions Paid To Beneficiaries of Pension-Benefit Plans Funded With
 Life Insurance Companies
 by Type of Contract
 Annual Payments: 1965 - 1969
 (Millions of dollars)

Plan	Year				
	1965	1966	1967	1968	1969
Group Annuity Deferred Annuity	NA	\$ 430	\$ 445	\$ 455	\$ 448
Deposit Administration Group Annuity	NA	\$ 265	\$ 335	\$ 430	\$ 556
Individual Policy Pension Trust	NA	\$ 60	\$ 70	\$ 85	\$ 93
Group Permanent	NA	\$ 20	\$ 20	\$ 20	\$ 25
Other	NA	\$ 35	\$ 40	\$ 40	\$ 37
TOTAL - All Plans	\$ 720	\$ 810	\$ 910	\$1,030	\$1,159

N.A. -- not available

Source: Institute of Life Insurance

TABLE VI-21

RESERVES AND PREMIUMS PAID

GROUP AND INDIVIDUAL

H. R. 10 PLANS
FUNDED WITH LIFE INSURANCE COMPANIES
Annual 1965-69
(\$ millions)

<u>YEAR</u>	<u>RESERVES</u>	<u>PREMIUMS PAID IN</u>
1965	22.6	14.7
1966	35.6	18.9
1967	75.1	42.5
1968	146.9	82.3
1969	300.0	105.0

NOTE: Reserves are as of December 31, each year.
Premiums are reported on an incurred basis during
the calendar year.

SOURCE: Institute of Life Insurance

TABLE VI-22

Reserves of Pension-Benefit Plans Funded With Life Insurance Companies

Year End 1969
(millions of dollars)

Plan	Respondent Group				Respondent Sample Totals	Industry Totals
	I	II	III	IV		
Group Annuity -- Deferred Annuity	\$10,827	\$ 619	\$ 214	\$ 599	\$12,259	\$12,850
Group Annuity -- Deposit Administration	\$13,592	\$ 2,196	\$ 1,055	\$ 740	\$17,583	\$18,275
Total Group Annuity*	\$24,419	\$ 2,815	\$ 1,269	\$ 1,339	\$29,842	\$31,125
TOTAL: All Insured Pension Plans	\$25,539	\$ 3,297	\$ 2,186	\$ 3,886	\$34,908	\$37,900

* Note: Total Group Annuity equals the sum of Deferred Annuity and Deposit Administration.

Source: Industry totals from the Institute of Life Insurance. Respondent group totals from copies of individual company filings with the Institute of Life Insurance supplied by the companies.

TABLE VI-23

Considerations Paid by Pension-Benefit Plans Funded With Life Insurance Companies
1969
(millions of dollars)

Type of Contract	Respondent Group				Respondent Sample Totals	Industry Totals
	I	II	III	IV		
Group Annuity -- Deferred Annuity	\$ 571	\$ 64	\$ 22	\$ 46	\$ 704	\$ 750
Group Annuity -- Deposit Administration	\$1,408	\$ 207	\$ 144	\$ 138	\$1,896	\$2,000
Total Group Annuity*	\$1,979	\$ 271	\$ 166	\$ 184	\$2,600	\$2,750
TOTAL: All Insured Pension Plans	\$2,170**	\$ 362	\$ 337	\$ 820	\$3,689	\$3,850

* Total Group Annuity equals the sum of Deferred Annuity and Deposit Administration.

** One company in the respondent group did not supply total premium income. The figure for this company is estimated.

Note: Premium income is reported on an incurred basis after deduction of withdrawal credits.

Source: Industry totals from the Institute of Life Insurance. Respondent group totals from copies of individual company filings with the Institute of Life Insurance supplied the Study by the companies.

TABLE VI-24

Pensions Paid to Beneficiaries of Pension-Benefit Plans Funded With
Life Insurance Companies - 1969
(millions of dollars)

Plan	Respondent Group				Respondent Sample Totals	Industry Totals
	I	II	III	IV		
Group Annuity -- Deferred Annuity	\$ 383	\$ 24	\$ 6	\$ 15	\$ 428	\$ 448
Group Annuity -- Deposit Administration	\$ 434	\$ 67	\$ 30	\$ 16	\$ 547	\$ 556
Total Group Annuity*	\$ 817	\$ 91	\$ 36	\$ 31	\$ 975	\$1,004
TOTAL: All Insured Pension Plans	\$ 840	\$ 116	\$ 55	\$ 34	\$1,045	\$1,159

* Total Group Annuity equals the sum of Deferred Annuity and Deposit Administration.

Note: Some figures in the respondent groups broken down by type of plan are estimated where the detail was not provided by a few companies.

Source: Industry totals from the Institute of Life Insurance. Respondent group totals from copies of individual company filings with the Institute of Life Insurance supplied the Study by the companies.

TABLE VI-25

Proportion of Group Annuity Contract Reserves
Accounted for by Companies in Each Respondent Group
(End 1969)

Respondent Group	(1) Deferred Annuity Contracts		(2) Deposit Administration Contracts		(3) Total Group Annuity Contracts	
	Sample	Universe	Sample	Universe	Sample	Universe
I	.883	.843	.773	.744	.818	.785
II	.050	.048	.125	.120	.094	.090
III	.017	.017	.060	.058	.043	.041
IV	.049	.047	.042	.040	.045	.043
Totals	1.000	.955	1.000	.962	1.000	.959

Note: Total Group Annuity Contracts (column 3) equals the sum of those represented in columns (1) and (2).

Sources: Universe data from the Institute of Life Insurance. Sample data from individual company filings to the Institute of Life Insurance supplied to the Study by the companies.

TABLE VI-26

Proportion of Consideration Payments Made to Insurers on Group Annuity Contracts
Accounted for by Each Respondent Group
(1969)

Respondent Group	(1) Deferred Annuity Contracts		(2) Deposit Administration Contracts		(3) Total Group Annuity Contracts	
	Sample	Universe	Sample	Universe	Sample	Universe
I	.811	.761	.743	.704	.761	.720
II	.091	.085	.109	.104	.104	.099
III	.031	.029	.076	.072	.064	.060
IV	.065	.061	.073	.069	.071	.067
Totals	1.000	.936	1.000	.949	1.000	.946

Note: Total Group Annuity Contracts (column 3) equals the sum of those represented in columns (1) and (2).

Sources: Universe data from the Institute of Life Insurance. Sample data from individual company filings to the Institute of Life Insurance supplied to the Study by the companies.

TABLES VI-27

Proportion of Pension Benefits Paid by Insurers
on Group Annuity Contracts by Each Respondent Group
(1969)

Respondent Group	(1) Deferred Annuity Contracts		(2) Deposit Administration Contracts		(3) Total Group Annuity Contracts	
	Sample	Universe	Sample	Universe	Sample	Universe
I	.895	.855	.793	.781	.838	.814
II	.056	.054	.122	.121	.093	.091
III	.014	.013	.055	.054	.037	.036
IV	.035	.033	.029	.029	.032	.031
Totals	1.000	.955	1.000	.985	1.000	.972

Note: Total Group Annuity Contracts (column 3) equals the sum of those represented in columns (1) and (2).

Sources: Universe data from the Institute of Life Insurance. Sample data from individual company filings to the Institute of Life Insurance supplied to the Study by the companies.

The extent to which the six extraordinarily large (Group I) companies dominate the group annuity portion of the industry is made clear by these tables. Nearly four-fifths of group annuity reserves reside with these six firms. Over 87 percent of reserves are accounted for by the ten largest firms. The fact that the large, but not giant, Group II and III companies account for a somewhat higher percentage of contributions paid in by group annuity contracts than of reserves or benefits paid suggests that their share of the business may be increasing somewhat.¹⁶⁷ The same observation is also applicable to Group IV companies. Thus, some modest dilution of concentration may be occurring.¹⁶⁸

d. Services, costs and asset withdrawal provisions associated with group annuity contracts

(1) *Types of services provided*

Insurers offer a variety of services to group annuity contractholders. These include services associated with (1) sale and administration of the group annuity contract, (2) administration of the underlying retirement or profit-sharing plan, and (3) management of one or more investment accounts. Services which are provided for contracts and plans include recordkeeping functions for plan participants including active employees and annuitants, mortality, expense and investment guarantees, and consultation on actuarial and other features of pension plan design. Management of an investment account involves periodic asset valuations, maintaining records of asset holdings and transactions, producing and distributing reports to contractholders, consulting with participating contractholders or their investment advisers, performing security and loan analysis, and making investment decisions and determining how best to implement such decisions.

Where a separate account is utilized, charges for many of these services may be made directly to the account, or may be made to the contract's deposit fund or general account interest or may be made to a trustee or other party affiliated with the funding employer or employee group and paid from sources other than assets held by the insurer. The direct costs of executing transactions for a separate account (for example, brokerage commissions and transfer taxes) are usually charged directly to the account. Generally, investment management fees are also assessed directly from the separate account's assets. Charges for insurer services provided in connection with a contract utilizing a separate account are sometimes assessed against the account's assets but more frequently are charged to the contractholder's deposit fund or elsewhere.

(2) *Methods of assessing charges*

In the determination of the gross premium or the amount of the periodic consideration to be paid to the insurer under the annuity contract, insurers charge a loading for estimated sales and administrative costs plus profit (contribution to surplus for a mutual company). In individual annuity contracts and smaller group contracts the magnitude of this load is often expressible as a flat percentage

¹⁶⁷ Contributions paid by contractholders should be more sensitive to shifts in business among companies than changes in reserves or benefit payments. However, it is not possible to translate changes in contributions into prospective shifts in assets under management without knowing a great deal about what services are being paid for by these contributions.

¹⁶⁸ In this connection, see the analysis of net new business in sec. 6.c below.

of annual considerations as determined from mortality and investment return assumptions. In larger group contracts the load is more generally expressible in terms of a graduated schedule with respect to annual considerations. The load factor represents the maximum level of expenses the contractholder may incur; if actual expenses fall short of this amount, which is the usual case, this will be reflected in the calculation of dividend credits to contractholders. Should expenses exceed the load estimates, the excess is absorbed by the insurer.¹⁶⁹

Actual sales and administrative expenses are usually charged directly against the experience fund. Commissions are frequently charged as paid although some companies amortize any higher first-year commissions over several years. Taxes are usually charged as paid. In most cases general administrative charges are assessed to a particular case by use of some general expense formula. The formula may be based on the amount of annual considerations, the number of active participants, the number of annuitants, some combination of these, or a more elaborate formula may be utilized where certain contractual features are likely to result in higher than average expenses for the case. For larger contracts, detailed records of time spent in various functions including services of pension representatives, actuarial work, and contract or amendment writing will be maintained in order to determine as accurately as possible the direct expenses chargeable to the case. A formula approach will still be required to attribute the overhead expenses to each case.

Traditionally expenses incurred as a result of managing the investment account have not been treated as administrative expenses but rather have been charged directly against investment earnings in determining the net investment rate of return which is credited to the experience fund. Any incurred federal tax on investment income is normally included in the expenses charged against investment earnings. Where the investment year method is used to credit investment income, a number of investment rates of return are determined.

(3) *Transferability of group annuity deposit funds and separate account assets*

If a pension-benefit plan is funded in a bank managed trust account, a bank managing agency account, a bank commingled employee-benefit-plan account, or in an individual account managed by an investment counseling firm, or in a mutual fund, the plan's interest in any of these investment accounts can normally be expeditiously redeemed or transferred to another managing trustee or agent. The transfer of interests in an insurance company's account to another funding agent has historically been a more complex task.¹⁷⁰ Many employers, upon investigating the possibility of shifting funds to another manager, have found (1) that their contract prohibits such action, or (2) a transfer can be effected, but a substantial surrender charge is incurred and/or the insurer reserves the right to stretch the payout over a long period of time, perhaps ten years or more. Never transferable are funds which have been allocated to individual plan participants and that portion of unallocated funds which is required to meet reserve needs for par-

¹⁶⁹ As observed above (sec. 3) some employers have chosen not to include expense guarantees in the contract, and absorb actual expenses directly.

¹⁷⁰ In the process of any redemption or transfer the plan's assets cannot be invaded by the funding employer(s). Insurance companies commonly require certification of the continuing qualified status of an IRS qualified plan before transfer is effected.

ticipants or other beneficiaries who are receiving benefit payments at the time of discontinuance. Since deferred annuity contracts are allocated instruments, contributions are locked into the insurer to which they were made.

The transferability of the uncommitted portion of unallocated funds to another funding agent, or among accounts within the insurer, depends upon the particular contract. Generally, funds can be transferred more quickly, with a lesser (if any) penalty charge, from direct-rated deposit administration (IPG) contracts than from regular deposit administration contracts. In some companies, under some deposit administration contracts, funds can be shifted more quickly from separate accounts than from the general account, and in some circumstances, more expeditiously from a single client separate account than from a commingled separate account. In other companies, or under other contracts, however, there may be no difference between separate accounts and the general account in this regard.

Generally, a substantially larger proportion of deposit administration contracts outstanding today, (and probably a much higher proportion of contracts written in recent years) permit transferability than was true ten or twenty years ago. Where transferability is impossible, the most the employer can do is to discontinue making new contributions to the insurer and purchase annuities from the insurer for eligible participants with the unallocated funds which remain on deposit. During the 1950's and early 1960's when insurers lost a substantial amount of pension business to banks, most of the losses took the form of a discontinuance of new contributions, the interests from past contributions being frozen in the insurance companies. Thus, life companies maintained on the books many old contracts from which they were receiving no new money.

Basically, transferability of unallocated funds from an insurer involves a three stage determination, including:

- (1) Determination of the base value of the unallocated funds not required to meet any contractual commitments;
- (2) Determination of the proportion of this face value which can be transferred from the insurer; and
- (3) Determination of the time rate at which the withdrawal can proceed.

Items 2 and 3 may necessitate a joint decision, and in some contracts the contractholder is explicitly provided with options which permit him to trade off the proportion of the base value recapturable against the time period over which funds may be withdrawn.

In determining the proportion of the base value which is withdrawable, three principal elements seem to be involved:

- (1) The assessment of the deposit fund with unamortized sales charges and administrative expenses;
- (2) A penalty of surrender charge levied on withdrawals; and
- (3) A discount (or premium) resulting from adjustment of the book value of the deposit fund to market valuation.

The trend in more recently written contracts is to determine the assessment for unamortized sales charges and administrative expenses from the experience record of the individual contract. The proportion of the base value which is assessed will generally vary negatively with

(1) the age of the contract, and (2) the size of the fund.¹⁷¹ The assessment could amount to as much as 10 to 15 percent of the base value of the "free" portion of the deposit fund.

A somewhat older device which still exists in many contracts is to stipulate a percentage of the base value of the fund which shall be withdrawable. In most instances this appears as a flat, unqualified, percentage; 95 percent of the balance is perhaps the most popular figure. Some companies include a percentage scale in the contract which is a function of the age of the contract, and sometimes also depends upon the size of the fund. Some contracts guarantee a minimum percentage which can be transferred with the actual percentage being higher if justified by the contract's experience record. Since expenses are charged directly as incurred to direct-rated deposit administration contracts, the recoverable proportion is frequency 100 percent. However, some insurers assess a surrender charge against these contacts as well; this charge can run up to four or five percent of the fund balance.

Time delays in effecting transfers can occur for many reasons. The primary reason for spreading out payments over a period of years is the prevention of anti-selection in terms of market values. This problem specifically concerns plans funded in general accounts, but any separate account portion is also affected in those cases where the separate account assets must be first transferred to the general fund and then withdrawal of the general fund balance (including the newly transferred separate account interests) proceeds along a specified timetable. Most life insurance company assets are valued on an amortized cost basis in accordance with NAIC valuation rules.¹⁷² At times when yields on debt obligations are historically high, as in recent years, the book value of the debt securities and mortgage loans in life company portfolios exceeds the market value of these assets. In periods of low yield (for example, the 1940's), the market value of many portfolios exceeds their book value. One means of preventing antiselection is to spread withdrawal payments over a period of ten or fifteen years when withdrawals are requested at a time when the book value of the funds exceeds the market value. A more direct method is to adjust the value of the fund balance to market.¹⁷³ It is becoming

¹⁷¹ The more recently the contract has been written, the less of the initial sales charge will have been recovered and smaller contracts will take a longer period of time to amortize the load factor.

¹⁷² Except that under NAIC valuation standards common stocks are valued at market.

¹⁷³ This adjustment can be done through application of the ordinary bond valuation formula. The payout value determined in this way is a function of the average yield earned on the fund compared to the yield at which new funds can be invested. As observed in the text the fund will be paid out at a premium if the new money rate is significantly greater than the average earned rate and at a discount if the reverse situation holds. Some assumption must be made about the asset rollover period as well. The rate of portfolio rollover tends to be negatively related to $r_1 - r_2$ where r_1 is the new money rate and r_2 is the fund's average earned rate. The value of the fund's free balance is then determined by computing the current price of an imaginary bond which has a coupon rate of r_2 and yields r_1 over a stipulated period (the assumed rollover period). The hypothetical bond is most accurately conceived to be a serial bond which matures in uniform amounts each year and reaches final maturity at the end of the assumed rollover period. Some companies have simplified determination of the new money rate by making it a function of a well-known bond yield index. An example of how the proportion of the free fund balance which may be withdrawn depends upon the two rates of return is provided in the following table which is taken from a schedule provided by one respondent.

$r_1 - r_2$:	Percent payable
2.00 percent-----	86. 84
1.50 percent-----	90. 78
.50 percent-----	97. 23
0 percent-----	99. 75
-.50 percent-----	101. 80
-1.00 percent-----	103. 37
-1.50 percent-----	104. 48
-2.00 percent-----	105. 11

more common to at least provide the contractholder the option of withdrawing a lump sum which reflects a "financial loss or gain" adjustment made by the insurer if the contractholder finds this preferable to a prolonged series of installment payments.¹⁷⁴

The Study found contracts where surrender charges are assessed against withdrawals even though there are no incurred, but unpaid, expenses or sales charges. Also contracts were found where payments are delayed three or four years even after the balance has been adjusted to market value. However, competitive pressure seems to be forcing at least the larger insurers in the group annuity business to write contracts which assess terminating contracts for incurred administrative expenses and sales load charges plus expenses directly related to the transfer, but do not assess additional penalty charges, and also permit lump sum withdrawals, within a period of a few weeks or months, of the uncommitted portion of the unallocated deposit fund balance adjusted to market value.¹⁷⁵ However, substantial variations remain among contracts currently being written.

Once the amount of the withdrawable portion is determined delays of a few weeks or months may be attributable to the time absorbed in administrative details, asset liquidation, obtaining certification of continued IRS qualification as well as emergency deferral provisions which are triggered by such things as suspension of trading in the securities markets or bank closings. If only transfer of separate account assets is involved, (the insurer retaining the general account portion of the fund), then often the separate account portion can be withdrawn at full market value (less any direct transfer costs) within a period varying among companies from a week to ninety days. If the separate account interest is a substantial interest in a commingled account the insurer will reserve the right to defer payments in order that the required asset liquidation can be accomplished in a manner which does not adversely affect the other interests in the account. In this situation there may be some advantage to a large contractholder in having an individual separate account.

In unregistered commingled separate accounts many companies place limits on the amount that may be withdrawn in any month from a particular account, and in larger cases this could stretch transfer payments over one to two years. Some companies simply prohibit any withdrawal during the early years of the contract's life. Others make partial transfer difficult or impossible; for example, one large company permits transfer to another funding agent for most separate accounts only if all contributions to the insurer under the contract are discontinued.

Surrender charges may be levied against separate accounts in the event of transfer in accordance with the contractual provisions discussed above. With respect to both surrender charges and delay pro-

¹⁷⁴ When payments are stretched out over time most insurers credit the balance with a rate of interest which is identical to the guaranteed rate used in the contract or is separately stipulated. In either case, for most contracts this will mean an interest rate of 2½ to 4 percent. No credit is given to interest earned in excess of the guarantee.

¹⁷⁵ Employers' interest in having the flexibility to transfer funds evolves not only from an increasing concern with investment performance but also from awareness of the frequency with which corporate reorganizations have been occurring. Frequently it is found desirable to consolidate the administration and funding of pension plans in the aftermath of a corporate merger. See sec. 8.c for an indication of the importance of plan consolidation resulting from mergers as a cause of insured contract terminations.

visions there are many variations in the way in which separate accounts are treated.

In some companies, separate account interests must be transferred to the deposit administration fund before transfer to an outside agent can be effected. Any charges are made against the deposit fund and separate account and general account interests are not distinguished in determining the time period over which transfer will be made. In some cases those separate account interests which represent contributions originally placed in the separate account are segregated from assets attributable to prior transfers of interest from the general account to a separate account. The latter may then be treated as general account funds in determining surrender charges and the payout timetable.

Withdrawal of separate account assets can usually be accomplished more expeditiously if passage through the deposit administration fund or general account is not required. As indicated above, it may sometimes be an advantage for an employer to have his own separate account, with all administrative expenses being charged as incurred to the account or to the employer directly. In such a case there may be no surrender charge and transfer can be quickly effected.

In sum, employers can find insurers which provide flexibility in the method by which expenses are assessed and assurances of quick asset withdrawal, if that is desired, regardless of whether assets are funded in a separate account or in the general account. However, many existing contracts continue to contain features which can make such withdrawals cumbersome and time consuming.

5. Changes in Funding Media: The Growth and Use of Separate Account Funding

This section examines the extent to which pension-benefit plans funded with insurers have taken advantage of the increased investment flexibility made possible by the establishment of separate accounts and provides information on the purposes for which separate account funding is utilized. Separate accounts are primarily used as funding media by plans which have deposit administration contracts, including the immediate participation guarantee form of such contracts. As observed previously, they constitute the means by which insured plans can obtain equity funding for a portion or all of the plan's accumulated assets.¹⁷⁶

As we have seen, deposit administration contracts are life insurers' version of unallocated funding instruments. Consequently, the primary function of separate account funding is to produce investment results which, if investment performance is favorable, will substantially reduce the cost to the employer of providing retirement benefits. Separate accounts may also be used as funding media for variable annuities issued to group pension-benefit plan participants.¹⁷⁷ Ordi-

¹⁷⁶ Separate accounts limited to corporate debt obligations, or mortgage loans, also exist, as well as accounts which have a balanced debt-equity investment objective. However, the predominant purpose of separate accounts has been to provide vehicles for investment in common equities, and, consequently in what follows the Study sometimes identifies equity funding with separate account funding without repeating this caveat. See the section dealing with separate accounts below for a description of the composition of existing accounts by investment objective and by assets in fact held (sec. E.)

¹⁷⁷ Variable annuities (providing for variable retirement benefits) are sometimes purchased for annuitants under deferred annuity contracts.

narily, separate accounts are used for this purpose with contracts under which benefits vary directly with the investment results of the dedicated account. Occasionally, however, separate accounts are used to fund annuity contracts under which benefits vary according to a specified price, wage, interest rate, common stock price or other index, or according to a formula specified in the contract.¹⁷⁸ However, to date, benefits which vary according to investment results, indices or formulae occur relatively infrequently in connection with pension-benefit plan contracts, and the primary employer motivation for utilizing separate account funding has been to seek more equity oriented investment performance than is obtainable in the general account in order to achieve as much accumulation of unallocated funds as possible through investment returns instead of employer contributions.

Respondents to the group annuity questionnaire (Form I-51) were asked to supply the number of contracts and total reserves on active group annuity contracts¹⁷⁹ allocated to (1) the types of funding media utilized (general or separate accounts), and further to (2) designated benefits (fixed or variable; deferred or in course of payment) as opposed to unallocated funds. This reporting was requested as of the end of each of the five years, 1965 to 1969. Reserves were defined to include liabilities similar to reserves, such as deposit funds, even though not reported as reserves in the NAIC Annual Statement. The separation of reserves and contracts by funding media was required to be done for all group annuity contracts which qualified under the definition of "active group annuity contracts" supplied by the Study.¹⁸⁰ The allotment of contracts and reserves, according to whether they represented unallocated funds or the various designated benefits, was allowed as an option to be limited to the 25 largest eligible group annuity contracts in force as of each reporting date. The size measure to be used in determining the 25 largest contracts was total reserves as defined above.

Tables VI-28 through VI-32 report the allocation of group annuity reserves to funding media for each of the reporting years by the same respondent groups utilized previously. These tables highlight the dramatic growth of interest in separate account funding during the four year period, 1966-1969. For the large Group I companies which dominate the business, the proportion of group annuity reserves in separate accounts increased from about one percent of the total in 1965 to 11 percent in 1969. By 1969 contracts accounting for 52 percent of group annuity reserves reported by Group I companies made some use of separate account funding,¹⁸¹ compared to 17 percent four years previous. For all other companies, 36 percent of group pension-benefit

¹⁷⁸ The B.L.S. Consumer Price Index is the most widely used price index. Benefits have been tied to the wage rate of a specified skill grade in the industry in question as well as to generalized wage indices. The simplest formula plans call for an annual increase of y percent per year where " y " is specified in the contract.

¹⁷⁹ As noted above, this was limited to include only contracts through which the responding insurer served as funding agent as of December 31 of each of the reporting years, and had, in fact, received contributions from the underlying plan (other than for the purchase of immediately payable annuities) at some time during the two years 1968-69. Group deferred annuities were included as well as deposit administration contracts but individual policy pension trusts, group permanent contracts, H.R. 10 plan contracts, 403(b) plan contracts and any similar plans in which contracts are essentially sold to individuals were explicitly excluded from the reporting universe.

¹⁸⁰ See *id.*

¹⁸¹ For these contracts which utilized separate accounts, 22 percent of their reserves were in separate accounts and 78 percent in general accounts.

plans measured by dollar reserves had some portion of those reserves in separate accounts by the end of 1969.

There is clear evidence that large cases are much more likely to use separate account funding than smaller ones. For example, although 52 percent of Group I respondents' reserves were in contracts using some separate account funding as of December 31, 1969, only 14 percent of the *number* of these companies' contracts made any use of separate accounts.¹⁸²

It is still unusual for contracts to utilize only separate account funding but 284 such contracts with \$338 million in reserves are reported by all respondents as of end-1969, (Table VI-32).¹⁸³ Thus, most plans which take advantage of separate account funding opportunities also utilize general account funding.¹⁸⁴ Total reserves attributable to separate accounts amounted to \$3.2 billion in 1969 or 11.5 percent of group annuity reserves reported as opposed to \$250 million or 1.3 percent of reserves four years previous.

The six large respondents making up Group I accounted for 82.5 percent¹⁸⁵ of group annuity reserves reported by all respondents in 1969 and 81.9 percent of all reserves attributed to separate account funding.¹⁸⁶ Thus, as of 1969, the large Group I companies accounted for about the same percentage of separate account reserves as of all group annuity reserves.

The primary purpose to which separate accounts have been put thus far is to fund group annuity contracts. About 97 percent of separate account assets represent interests held by group retirement plans of the types being considered here.¹⁸⁷ The remaining three percent represent interests of 403(b) plans, H.R. 10 plans, individual annuity contracts and respondent insurers' claims on the accounts.

Tables VI-33 to VI-37 show that the funds invested in separate accounts are predominantly unallocated funds.¹⁸⁸ For all respondents, 92 percent of separate account reserves represented unallocated funds. The percentage is similarly high for each respondent group. Thus, as indicated above, separate accounts are being used primarily to produce investment results which will, hopefully, reduce the funding employer(s) cost.¹⁸⁹

Tables VI-38 to VI-42 report similar funding information for that portion of group annuity reserves attributable to the general

¹⁸² The 14 percent figure also applies to all other respondents combined.

¹⁸³ It is possible that some of these contracts represent only part of an employer's funding program and other contracts with the same customer provide for general account funding.

¹⁸⁴ It is possible that in some instances this was due to federal securities regulation. A separate account was not eligible for the Rule 3c-3 exemption from the Investment Company Act if employee contributions were invested in the separate account.

¹⁸⁵ Compared with the 81.8 percent figure shown in Table VI-25 computed from survey figures submitted to the Institute of Life Insurance.

¹⁸⁶ The proportion of Group I to all respondents for all reserves was 85.4 percent in 1965; the separate account reserves ratio at that time was 73.6 percent.

¹⁸⁷ Including corporate plans, multi-employer plans, state and local government-retirement systems and respondent insurer's own plans. For a breakdown of the types of contract-holders using separate accounts see sec. E.

¹⁸⁸ As explained above, companies had the option in this portion of the questionnaire to limit their responses to the 25 largest contracts. Four Group I companies and two Group IV companies elected this option. Three other Group IV companies in 1969 and eleven others in 1965 completed the questionnaire for all contracts but had less than twenty-five eligible contracts on which to report.

¹⁸⁹ For convenience, some of the items from Tables VI-28 to VI-32 are repeated in these tables. The discrepancy reported in line 4 is due to the fact that some Group I and Group IV companies reported for only their 25 largest contracts on the portion of the Table which distinguishes unallocated from designated funds.

account. The unallocated portion of general account funds increased over the four year interval from 24 percent of total general account reserves as of end-1965 to 39 percent as of end-1969, reflecting the previously observed growth in deposit administration contract reserves. The absolute decline in reserves for deferred annuity fixed income benefits reflects conversions to deposit administration contracts and transfers of accumulated contributions to equity funding in separate accounts.

As suggested in the introduction to this section, variable benefits are of two basic types, namely (1) benefits which vary with investment results of a dedicated account, and (2) benefits which vary according to some index or formula. The former type of variable benefit can be achieved in a plan funded with an insurer only through a separate account.¹⁹⁰ The latter type of variability can be funded either through separate or general accounts.

Although an inspection of Tables VI-37 to VI-42 would suggest that variable benefits determined by index or formula, and funded in the general account, is the most common form of the various insured variable benefit features in use, no such conclusion is warranted because there is so little utilization of any variable benefit funding reported that these figures do not form an adequate information base for purposes of predicting how employers will use insurers to obtain variability in benefit payments. In fact, Table VI-43 shows that although most of the reserves are shown in the index or formula category most of the contracts which are utilizing variable benefits are equity arrangements where a separate account's investment results determine any changes in the level of periodic payments. Thus, for example, one company with two contracts accounts for 83 percent of the general account funded index or formula contracts and the same company accounts for nearly all the reserves for these species of contracts funded through separate accounts.¹⁹¹

Only 15 of the 40 respondents report any sort of variable benefit annuities in force in connection with group contracts and several large companies reported no such contracts in force. (Table VI-44.) However, since five of the ten largest companies reported on only their twenty-five largest contracts, it is possible that more contracts and reserves allocable to variable benefits based on separate account investment results exist than are reflected in these summaries. Table VI-45 shows the number of companies in each respondent group offering group variable annuity contracts which provide for variable benefits based on investment results of one or more separate accounts, and the year in which such contracts were first offered. Twenty-seven of the forty respondents reported that such contracts are offered and an additional four companies indicated a firm decision had been made to offer this form of variable benefits. Most of the remaining companies had a proposal to offer group variable annuity contracts currently under consideration.

Unlike the data reported in Tables VI-33 to VI-42 information on companies offering group variable benefit contracts is not, however,

¹⁹⁰ Or through a company which is solely dedicated to providing such benefits.

¹⁹¹ The company reported two contracts in each funding medium. The reporting method does not reveal whether the same two contracts are involved in use of both funding media.

limited to deferred annuity and deposit administration contracts. Group H.R. 10 and Section 403(b) offerings are also reflected and some companies have limited offerings to these fields. Other companies indicated that although variable benefit features are available to deposit administration contracts, no contracts had as of the reporting date put such options into effect.¹⁹²

There is some question as to whether variable benefits of any sort are likely to become common among the qualified pension-benefit plans. Employers have modified benefit features of their pension-benefit plans in a number of ways to reflect rising prices during the active lives of participating employees. Perhaps the most common method of accomplishing this is by relating benefits to the wage or salary earned by participants during their last years before retirement. Benefit payments are then ordinarily fixed in amount with no adjustments in payments taking place during the retirement period. Similarly, the level of benefits is not usually adjusted for those employees who terminated employment with vested rights prior to retirement.

In these cases, the employer may feel no particular obligation to former employees, and have no particular self interest in increasing his cost to protect retirees or their beneficiaries against inflation. Labor unions have concentrated more on increasing employers' contributions and/or the initial (fixed) level of benefits rather than demanding variable benefits. There may be a legitimate question as to whether it is appropriate to put retired employees' pension payments at risk through the issuance of variable annuities based upon investment results of a dedicated account. Perhaps most important, however, is the fact that the use of variable benefits defeats the employer's objective of using equity investment accounts to minimize his costs.

Cost of living or similar contracts might seem to be more suitable to the retired employee's needs and more compatible with employer objectives. However, open-ended cost of living guarantees can prove to be very expensive and although several insurers actively offer such features, the demand thus far appears to be limited.

6. Growth and Change: New Business and Terminated Business

Growth in group annuity reserves is generated by growth in existing cases administered by issuers, and by the acquisition of new cases in excess of cases terminated in whole or in part.¹⁹³ In order for the Study to better understand the mechanics and characteristics of the growth of group annuity business, respondent companies were asked to supply, for the two years 1968-1969, data on newly acquired business and on terminated business.

a. New business

As before, group annuity agreements were defined to include group deferred annuities and deposit administration (including IPG)

¹⁹² However, all the information being reported relates to only those cases where the insurers have an obligation to individual annuitants. There do exist situations in which an employer pays variable benefits to plan beneficiaries from unallocated funds in a separate account.

¹⁹³ The term "case" is used by group annuity departments as a synonym for "customer." It is distinguished from "contract" or "plan" in that some plans may involve more than one contract and some customers may have more than one plan funded with an insurer. It is most meaningful to talk about "cases" or "customers" when discussing new business or terminations.

contracts. Individual policy pension trusts, group permanent contracts and the group "tax-sheltered" contracts were explicitly excluded. New cases were limited to cases which represented new group annuity customers to the respondent company and cases for which the company served as funding agent during the accumulation period of the contract. The latter limitation excluded new business resulting from a trustee plan which decides to pay out benefits to retiring employees by purchasing immediately payable annuities or life income retirement contracts. This limitation also excluded all single payment deferred annuities. Thus, the new business reported was deliberately restricted to cases in which the insurer is designated to play a significant investment management role. The restriction to "new faces" also results in exclusion of amounts transferred from another funding agent to a respondent company if the respondent had a contractual agreement with the customer prior to January 1, 1968. It would have been desirable to obtain these transfers but the record searches required would have been quite difficult, if not impossible, for many respondents.

Respondents did report on some cases which did not represent "new faces" to the insurance company although they were new to the group annuity department as defined above. Thus, transfers or conversions from individual contracts, group permanent contracts, etc. are reflected in Tables VI-46 to VI-50 below. These instances account for most of the cases shown in item 2.5 in these tables.

Tables VI-46 to VI-50 summarize the information on group annuity contracts newly issued during 1968-1969 for each of the respondent groups utilized above and for all respondents. It is difficult to define a meaningful measure of the quantitative significance of new pension cases. The procedure selected here was to ask each respondent to estimate the amount of annual contributions each new case would produce once it was well established. The responding companies reported over 4,000 new cases acquired during 1968 and 1969 which they forecast would produce annual contributions in excess of \$250 million (item V, Table VI-50). The large companies represented in Respondent Group I accounted for 1,312 of these cases and nearly \$160 million of the forecasted annual contributions. Interestingly, these large companies which dominate the outstanding group annuity business, as shown above, appear to account for a significantly smaller proportion of newly issued business.¹⁹⁴ This corroborates earlier evidence indicating that some dilution in the degree of concentration in the group annuity business may be occurring.

Tables VI-46 to VI-50 also report information on characteristics of the newly acquired business, including sources of new cases, prior history of the pension plans represented and services provided by the respondent companies. In completing this portion of the questionnaires, respondents were permitted to research their 25 largest new cases if their records did not readily permit description of all new cases.¹⁹⁵ Item IV in Tables VI-46 to VI-50 reports the totals for new

¹⁹⁴ For example, Group I respondents accounted for only 63 percent of the estimated annual contributions from new contracts although they accounted for 76 percent of all group annuity premiums and contributions received by the responding companies in 1969.

¹⁹⁵ The 25 largest cases were to be determined by estimating the annual contributions each case would produce once established.

cases on which the descriptive characteristics shown in Sections I, II and III of the tables are reported. Four of the six companies in Group I exercised the option of reporting on only their 25 largest cases; one of the four companies in Group II, none of the Group III companies and two of the remaining companies also availed themselves of the 25 case option.

Most new cases appear to originate either with the insurer's representatives or with pension-benefit plan consulting firms. The "originator" indicated in Part I of Tables VI-46 to VI-50 refers to the initial source of the case, that is, the person or firm which first brought the case to the respondent insurer's attention.¹⁹⁶ Once the case has been introduced to the insurance company, its personnel will, of course, be involved in the negotiation of the specific contract provisions. Not too much should be made of the reported distinction between life companies' personnel as opposed to consulting firms as sources of new business. In large cases a consulting firm will often play a significant role, but the employer or trustee may have contacted the consulting firm as a consequence of having been previously contacted by a field representative of the responding insurer. Since these historical details are difficult to disentangle, and often the proper designation of "the originator" may not be obvious even where the facts are known, only limited meaning can be attached to the relative amounts of new business introduced by consulting firms as opposed to the insurer's representatives. In particular, it is probable that the summary of Group I responses underestimates the significance of consulting firms.¹⁹⁷ Their involvement appears much more important in the Group II and III responses. Two of the six Group I respondents¹⁹⁸ reported that more new business (in terms of estimated contributions) originated with consulting firms than with their own personnel, one of the four Group II respondents and four of the five Group III respondents reported that consulting firms were the source of a majority of new business.

Life companies that wish to be competitive in the larger pension plan business find it necessary to cultivate consulting firms which perform a significant role in directing business to funding agents.¹⁹⁹ Banks, investment advisers or other non-insurance financial institutions are almost never sources of pension business to insurers when the cases which restrict insurers essentially to annuity payouts are excluded from consideration.²⁰⁰ To a limited degree cases are introduced by representatives of another insurer where, for example, the originat-

¹⁹⁶ "Walk-ins," where the employer or plan trustee (if the trustee is not a financial institution) initiates the contact directly with the insurer, are treated as originated by the insurer's personnel.

¹⁹⁷ Of the 190 cases reported by Group I respondents as originated by their personnel, one exceptional case accounts for half the estimated annual contributions originated in this way by Group I respondents and nearly one-third of forecasted contributions initiated by company personnel for all respondents.

¹⁹⁸ One of these reported that each of its 25 largest cases (all those reported on) originated with consulting firms. However, the largest companies do have substantial field forces which actively generate group annuity business. The number of field representatives appears to fall off very quickly as one moves beyond the five or ten largest companies.

¹⁹⁹ Banks appear to have some significant advantages in the competition to establish close working relations with consulting firms. See the discussion of the competitive environment in sec. 3.c above.

²⁰⁰ Actually, it appears that large trustee pension plans (with assets of over \$100 million) rarely utilize annuities purchased from insurers as a payment mechanism. The Study collected information directly from 132 large corporate trustee pension plans of which 101 were bank managed, 16 managed by investment advisory firms and 15 self-managed. Of these 132 only eight bank managed and one investment adviser managed plans paid retirement benefits through annuity contracts purchased from insurers.

ing insurer does not offer group annuity contracts or the specific features desired.

The "other sources" category in Tables VI-46 to VI-50 primarily consists of plans covering the respondent insurers' employees or, in a few instances, cases originated by general insurance agents.

The majority of new group annuity cases acquired by respondent companies during 1968-1969 represented newly created pension-benefit plans.²⁰¹ About 23 percent of the new cases in terms of estimated contributions (8 percent of the number of new cases) were removed from banks or other non-insurance funding agents. Of 37 companies reporting new business during 1968-1969, 30 obtained more business (in terms of estimated contributions) from newly established plans than from any other source.²⁰²

Section III of Tables VI-46 to VI-50 provides information on contractual services supplied to the reported new cases by the respondent insurers. Of particular interest is the frequency of separate account funding in new cases, since the availability of equity funding through separate accounts has been presumed to be of major significance in determining the ability of insurance companies to compete for pension business. As noted above, contracts accounting for about half of the responding companies' group annuity reserves (as of the end of 1969) took some advantage of separate account funding. Measured in terms of estimated annual contributions to be generated from newly issued business, Table VI-50 shows that cases accounting for 71 percent of new group annuity business utilize some separate account funding.²⁰³ The proportion of new business making use of separate accounts by respondent group is: Group I, 86 percent; Group II, 40 percent; Group III, 49 percent; and Group IV, 55 percent.

However, this percentage may be biased upward for the large companies since four Group I and one Group II companies responded for only their 25 largest cases, and there may be a higher incidence of usage of separate accounts with larger cases. To check this possibility, then ten Group I-Group II respondents were split into two groups of five each; one of these groups consisted of the five companies which reported on all new cases and the other of the five companies responding on only their 25 largest new cases. Of those companies reporting on only 25 cases, 88 percent of the forecasted contributions were in cases utilizing separate account funding as opposed to 56 percent²⁰⁴ for companies reporting on all new business. This does suggest that 1) larger cases are more likely to make use of separate accounts, and 2) therefore the Group I proportion of 85 percent reported above is probably somewhat higher than that applicable to all these respond-

²⁰¹ For all respondents, 79 percent of the number of new cases and 60 percent of the estimated contributions represented contracts with newly established plans. See sec. II of Table VI-50.

²⁰² For one company, plans which added the respondent as a funding agent to existing funding agents represented the most important source; one company reported that funds removed from other insurers was its major source; three companies obtained more cases by removing accounts from banks or other non-insurance funding agents than in any other way and two attributed more of their new business to "other sources," i.e., conversion of non-group insurance or annuity business to group annuity contracts within the company.

²⁰³ Item 3.2 in Tables VI-46 to VI-50 shows the number of new cases utilizing separate account funding and the *total contributions* expected from these cases. There is no attempt to break down anticipated contributions into that portion expected to flow into separate accounts as opposed to the portion going into the general account.

²⁰⁴ For the two large Group I companies reporting on all business the comparable figure was 77 percent.

ents' new business. Nonetheless, for the larger companies which are active in offering separate account funding, it appears that the proportion of their new group annuity agreements funding some contributions in one or more separate accounts is substantially higher than the proportion of existing accounts which utilize separate accounts.²⁰⁵

Another indication of the significance of separate account funding to larger cases is that 203 new cases with forecasted annual contributions of \$76 million are using *only* separate account funding. Another 460 cases with anticipated contributions of \$64 million a year are using both separate account and general account funding while the 1,637 cases utilizing only general account funding are expected to generate only about \$58 million a year in contributions.²⁰⁶ About \$63 million of the \$76 million in cases using only separate account funding is accounted for by Group I companies.²⁰⁷

Eighty-four percent of new cases (measured by forecasted annual contributions) opted for insurer guarantees of life income to plan participants.²⁰⁸ This percentage is about the same for Group I respondents (85 percent) as for all respondents. Some of the guarantees referred to may be conditional as, for example, is customary in direct rated deposit administration contracts. Some of the residual 16 percent presumably represents cases where employers are simply using insurers as investment managers and are assuming the underwriting risks themselves. However, insurer guarantees of income payments for a fixed period are also represented in the residual cases. On the other hand, the degree of risk-taking assumed by insurers may be quite minimal in some cases for which contractual guarantees are reported.

Tables VI-46 to VI-50 also contain summary information on the degree to which insurers provide record keeping and actuarial services for new cases. It seems likely that insurers would maintain records on the status of individual participants more frequently for smaller cases.²⁰⁹ There is some evidence to that effect in the larger companies but the pattern is not consistent when the large and smaller insurers are compared. Some companies maintain records for nearly all new cases, others for none or for a very small proportion of cases; for some companies the proportion of cases for which records are maintained is higher if the number of cases is used as a measure; for other companies this proportion is higher when forecasted contributions are used as a measure. This variance among companies is high in each respondent group. However, the five Group I and II companies which reported all

²⁰⁵ This is easier to establish in terms of numbers of contracts than in terms of dollar amount. Examining the number of contracts the Study has found above that about 14 percent of outstanding contracts made some use of separate accounts by year end 1969. This proportion also held for Group I companies. For all respondents, 29 percent of new cases were using separate accounts as were 50 percent of new cases reported by Group I companies. Comparisons in terms of dollar amounts are more difficult because our size measure of existing cases is reserves, but for new cases it is anticipated contributions. Thus, it is possible that the proportion of new contributions being channeled into separate accounts by in-force business is higher than the proportion of reserves attributable to separate accounts for the same contracts.

²⁰⁶ Computed from the figures reported in lines III, 3.1 and 3.2 and line IV of Table VI-50.

²⁰⁷ However, 166 of the 203 accounts which did *not* use general account funding were originated by the smaller (Group IV) respondents.

²⁰⁸ Elsewhere in Form I-51, the responding companies reported that 92 percent of employee-retirement-benefit plan income payments made during 1969 represented payments under contracts which guarantee life incomes to interested employees or other beneficiaries.

²⁰⁹ For larger cases there is more likely to be a plan administrator, individual or corporate trustee, or in split funding cases, another funding agent who maintains these records.

new cases are performing administrative services for a higher proportion of the number of new cases than the five companies which reported on only their largest twenty-five new cases. The former grouping reported providing administrative services for 78 percent of its new cases and the latter for only 22 percent. Thus, in larger companies it appears that record keeping is more frequently performed for smaller cases. In smaller companies, much of the variance which exists among companies in the proportion of cases for which administrative services are performed probably reflects differences in the extent to which the various respondent insurers provide such services.

In the provision of actuarial services there is reason to expect that the larger cases are less likely to utilize their funding insurance company, preferring to employ a consulting actuary for this purpose. Table VI-51 summarizes responses on this question. This table divides the Group I-Group II companies into the five that reported on all new cases and the five that reported on only their twenty-five largest cases.²¹⁰ The weighted averages shown treat each grouping of companies as a unit and the Table displays the percentage of all cases in each group (by number and by expected contributions) which use insurers for actuarial work. The unweighted average is computed by taking the percentage of each company's cases which use actuarial services and averaging these percentages for the companies in each group.

Examination of Table VI-51 does suggest that the large cases are less likely to elect to use their insurance company for actuarial design. This conclusion stands out especially from a comparison of the two groupings of respondent Group I and II companies. Also in all groups, the proportion of the number of cases electing to satisfy their actuarial needs with the funding insurer is greater than the comparable percentage of anticipated annual contributions.

Some companies also listed other services which are being provided the new cases. Most frequently cited services include tax filings and disclosure filings with the Labor Department under the Welfare and Pension Disclosure Act, annual statements, reports, booklets and field communications with both employers and employees, and plan administration and computation of benefits due eligible employees or other beneficiaries.

b. Terminated business

The group annuity business questionnaire also sought information on the amount of pension business lost during the 1968-1969 period, the reasons for such losses and the characteristics of such cases described in terms of services of the insurers which had been utilized by these customers. The definition of group annuity business remains unaltered. Terminations, however, are even more difficult to identify than are newly issued cases. This results primarily from the fact that termination of the contractual relationship between an employer or other agent of a pension plan and the insurance company often takes place over a long period of time and without any formal notice of termination. Consequently, a situation where a large plan reduces the amount of new contributions to the

²¹⁰ The latter group, therefore, reported on a total of 125 cases: the former group reported on 1,100 cases.

insurer, but otherwise maintains the relationship, may represent a larger loss of business, and of assets under management, than a number of complete terminations of smaller cases.

Responding companies were asked at a minimum to report on all formal notices of termination received by their companies during the two-year reporting period. In addition, they were requested to report on "any other significant termination or reduction in the use of your company as a funding agent" even though no formal notice of termination had been received.²¹¹ The latter instruction was necessary in order to obtain a picture of that portion of the group annuity business which life insurance companies are losing, but it did undoubtedly introduce a subjective element into the estimates which may have produced significant differences in the reporting basis among respondents. In preparing the questionnaire, the staff consulted with group annuity representatives from a number of major life insurance companies. In these discussions it was clear that the companies varied widely in the degree to which they systematically kept track of lost business and particularly in the extent to which they had developed any systematic means of flagging cases which had some significant probability of terminating.²¹² Consequently, more than normal caution should be used in interpreting the results of this portion of the group annuity questionnaire.

Respondents were provided with an option also granted on the new business portion of the questionnaires; namely, to limit responses describing their terminated business to the 25 most significant cases. Significance was to be measured in terms of "the loss in annual contributions which has or will occur as a result of the reduction in or termination of your company's services as funding agent."²¹³ Two Group I respondents and one Group II respondent availed themselves of this option. Since for these three companies the 75 cases on which descriptive information is reported represent 85 percent of total business they lost during the two years, the discrepancy is not very serious.

The amount of business lost through terminations and significant reductions was measured by the estimated decline in the amount of annual contributions which would result. The questionnaire instructions indicated that reductions in annual contributions "should be measured from the highest annual contributions achieved in the past five years to the level of annual contributions expected during the next several years," or by any consistent means which the company regularly uses in estimating losses in contributions.²¹⁴ Although respondents were instructed to report the method used in estimating the loss in contributions, only seven companies complied. It may be that most of the remainder used the method suggested, but it was not possible to ascertain this fact. Of the seven who did supply an explanation, two used essentially the method suggested in the questionnaire instructions, two measured the loss from the amount of premiums or deposits paid in during the last full contract year during which contributions were made, two compared the previous history with current contribu-

²¹¹ See the Instructions to Form I-51, Table 4.

²¹² A "watch" system might, for example, flag all cases where a plan's contributions dropped significantly below normal for a month or two and thereby trigger an investigation into the causes of the observed decline.

²¹³ Instructions to Form I-51, Table 4.

²¹⁴ Instructions to Table 4, Form I-51.

tions for affected cases and then estimated the lost contributions, and the seventh utilized an averaging method which it reported it has regularly used for this purpose. This method consists of computing the annual average of the gross premiums or deposits paid in for the three full years prior to the termination or reduction; this annual average figure is then used to represent the amount of lost contributions if the case is terminated. For cases which are reduced but not terminated, this average loss figure is multiplied by the ratio of lives remaining in the plan to lives covered before any reduction occurred to determine the estimated annual loss in contributions. Depending upon the temporal pattern of reduction or termination, application of each of these methods could result in significantly different answers.

With the preceding caveat in mind, the data on terminated and reduced cases are presented in Tables VI-52 to VI-56. These data are shown by the same respondent groups used above. Companies reported 882 terminated or reduced plans which represented lost contributions of about \$43 million on an annual basis. Group I respondents accounted for 427 of these plans and \$27 million of the lost contributions.

Table VI-57 summarizes the new business and lost business data by respondent group. All respondents reported net new business during 1968-1969 of \$212 million measured in terms of the anticipated net gain in annual contributions. Each respondent group reported new business in excess of lost business for the two-year period. Although there is some discrepancy between the percentage distribution of new business as against lost business among respondent groups, the distribution of net new business among respondent groups is essentially identical to the distribution of gross new business, because reported terminations are small relative to reported new business.

The primary reason pension-benefit plans terminated their contractual relationship with the responding insurers, or significantly reduced their contributions, was to shift assets to another funding agent. Most commonly the insured contract was terminated and the insurer replaced with a trustee, normally a bank. Some cases were lost to other insurers, however, and in a few instances the insurer's role was reduced in order to introduce a competing funding agent. All of this shifting among funding agents accounted for 51 percent of the number of cases lost or reduced. These cases represented 80 percent of the estimated loss in contributions indicating that the loss of larger plans must have been nearly always due to the desire to employ another funding agent. As shown in Table VI-58, Group I respondents reported that 88 percent of their losses in contributions were attributable to plans shifting assets to other funding agents. About 12 percent of all respondents' losses in contributions were attributable to corporate mergers which resulted in consolidation of the management of the employee benefit plans of the merged companies,²¹⁵ and seven percent were attributable to termination of the underlying pension plan itself. The latter reasons were obviously more frequently the cause of losses of smaller cases.

²¹⁵ In some instances a decision arising in these circumstances is undoubtedly tantamount to a decision to shift funding agents and should be added to similar cases reported above.

Tables VI-59 to VI-61 summarize the results of the competitive interaction which generates new customers for insurance companies and induces existing customers to leave. Thus insurers gain customers because, for example, bank managed retirement plans decide to split their funds among more managers, and insurers lose some business when their customers decide to adopt a split-funding policy. Gains and losses result to individual insurance companies as plan assets are shifted among insurers or between banks, investment counseling firms or other managers and insurers, and gains and losses occur as new plans are born and old ones die (without successors being established), or are consolidated. The data shown in Table VI-59 show that the primary cause of net gains to insurers from this process is that newly created plans funding with insurers significantly exceeds insured plans which are terminated or consolidated. All respondent groups also reported net gains in the competition between banks and other managers and insurance companies, including the results of employer decisions to split their funds among several managers. Thus, for example, although insurers reported losing more cases to banks and other trustees than they gained from these sources, they reported a net gain in terms of the anticipated impact upon annual contributions. As indicated above, however, it was difficult to design the questionnaires in a manner that insured symmetrical reporting on new cases as contrasted to terminated or reduced cases. In addition, it is possible that the impacts on annual contributions are optimistically estimated. For example, although the respondent companies account for about 95 percent of the existing group annuity business, they reported gaining 140 cases worth \$10 million in annual contributions from other insurers while losing only 102 cases worth \$7.6 million. While it is possible for these companies to have made net gains from the rest of the insurance industry, given the proportion of the industry represented by these respondents, it is more likely that most of this result reflects some asymmetry inherent in the reporting mechanics.²¹⁶

At least partially offsetting this asymmetry is the fact that respondents as a whole reported the information on sources of business for only 78 percent of their new business but reported reasons for termination for 94 percent of their lost business.²¹⁷ In particular, Group I companies reported the detailed information on 75 percent of their new business and 90 percent of their lost business; Group II companies on 65 percent of new business and 100 percent of lost business and Group III respondents on 94 percent of new business and 100 percent of lost business.²¹⁸ The large Group I and Group II companies that reported only on their largest twenty-five new cases fared less well in the competition with larger banks and other non-insurance funding agents than did the five large respondents which reported on all new business. The twenty-five case companies gained cases worth \$14.3 million in contributions from non-insurer funding agents but lost cases valued at \$13 million in contributions. The other five large companies gained cases worth \$15.4 million and lost only \$5.1 million in cases to these competing investment managers. The twenty-five case

²¹⁶ It should be observed, however, that Group I respondents reported a net loss of business to other insurers in terms of contributions as well as number of cases.

²¹⁷ Measured in terms of the impact on contributions.

²¹⁸ Group IV companies reported 100 percent of both new and lost business.

companies also reported a net loss of \$2.4 million in expected contributions to other insurers while the five companies reporting on all businesses showed a modest gain (\$800,000 in expected annual contributions) from the shifting of cases among insurers.

Tables VI-52 to VI-56 also present information on services provided by the insurers to group annuity cases which have terminated or significantly reduced their relationship with the respondent insurers. It is particularly interesting to contrast the lost business with the newly acquired business in terms of utilization of these services. Tables VI-62 to VI-66 facilitate this comparison by showing the percentage of new business and of lost business which made use of the various services. The percentages are computed both in terms of the number of cases and the expected gain (loss) in contributions. The most striking difference between new and terminated business is in the choice of funding media. Measured in terms of contributions, only 62 percent of the new business utilizes the respondents' general accounts compared to 97 percent of the lost business.²¹⁹ Utilization of separate account financing has a reversed pattern; new cases accounting for 71 percent of expected contributions fund at least partially in separate accounts but the comparable proportion for terminated or reduced business is just 29 percent.

This funding pattern is especially striking for the large Group I companies. Less than half their new business, measured in terms of expected contributions, is using general account funding as opposed to 96 percent of the lost business, and 86 percent of new business is using separate account funding compared to 41 percent of lost business. The same general pattern holds for other respondents although a much higher proportion of their new business consists of cases which are directing funds into general accounts; only a small percentage of these other insurers' lost cases had been making use of separate accounts.

The only other noticeable difference between new and lost business appears in the use of insurers' actuarial services by clients of Group I respondents. Measured in terms of contributions, new cases have a greater tendency to have actuarial work done elsewhere than is true of business lost by large insurance companies. This may reflect differences in the size distribution and age distribution of new cases as opposed to terminated cases.²²⁰

There were no apparent differences reported in "other services" utilized by terminated plans from those reported above for new cases.

c. Net new business: its contribution to the growth of group annuity business

One useful measure of the growth of life insurance companies' group annuity business is the growth in premiums, deposits and other

²¹⁹ However, 91 percent of the total number of new cases are utilizing general account funding. It is possible that one or two exceptional accounts distort the results when new business is measured by expected contributions.

²²⁰ Note that measured in terms of the number of cases there is no significant difference in the percentage of new versus lost cases employing the insurers' actuarial services. The average size of the new cases for which Group I companies reported in detail (measured in terms of annual contributions) is \$388,461 as opposed to \$112,804 for lost cases. Also, new plans, which as has been shown account for a large portion of new cases, are probably more likely to employ consulting actuaries than some of the lost cases which may have been insured for many years.

considerations received. Of the measures used above, the percentage change in the contributions is the most sensitive to changes in the growth pattern. There was an apparent quickening of this growth rate in 1968-1969.²²¹

The relative importance of newly acquired less terminated cases as compared to growth of cases which remain within insurance companies may now be assessed.

Respondent companies have estimated a net gain in new business during 1968-1969 of \$212 million in terms of expected annual contributions. This amount represents 8.2 percent of 1969 premiums and considerations received by these companies. There is no direct observation of the growth in premiums and considerations for the respondent companies during 1968-1969, but a reasonable estimate is possible. For the industry, the premiums and considerations increased by \$740 million during 1968-1969.²²² For 1969, the ratio of total premiums and considerations paid to respondent companies to the industry total was .946.²²³ Applying this ratio to the \$740 million figure results in about \$700 million as an estimate of the absolute growth in contributions during 1968-1969. The net new group annuity business acquired by respondent life companies during 1968-1969 was expected to add \$212 million at an annual rate to contributions paid in by group annuity business. This result is about 30 percent of the \$700 million net increase in contributions received by those companies during 1968-1969. While many of the new cases would not have contributed at the level assumed in the \$212 million estimate during 1968-1969, the \$700 million increase does, of course, reflect net new business acquired during this period and a period of time prior to 1968. As a rough order of magnitude, the 30 percent estimate provides a measure of the importance of net new business to the growth in premiums and considerations achieved by these insurers.²²⁴ This estimate indicates that although (1) the primary source of increased growth in contributions paid in by group annuity business has been growth from existing contracts which have remained with insurance companies, nevertheless (2) the growth obtained from "new faces", net of contributions lost from customers' removal of business, has been significant.

²²¹ The industry annual percentage growth figures for premiums and considerations attributable to the group deferred annuity and deposit administration plans were as follows:

1966	-----	4.6 percent	1968	-----	12.4 percent
1967	-----	9.5 percent	1969	-----	21.7 percent

²²² Table VI-19.

²²³ See Table VI-26.

²²⁴ As observed above the estimate may be high if for various reasons there was asymmetrical reporting which resulted in more comprehensive reporting of new cases acquired than of cases terminated or reduced.

TABLE VI-28
 FUNDING MEDIA USED BY GROUP ANNUITY CONTRACTS
 1965 - 1969

Respondent Group I

	1965		1966		1967		1968		1969	
	(1)	(2)	(1)	(2)	(1)	(2)	(1)	(2)	(1)	(2)
1. Totals for All Outstanding Group Annuity Contracts										
1.1. General Account Funding Only	6321	14,150,923	6712	13,072,182	7078	13,367,585	7335	12,830,400	7521	11,151,653
1.2. Combined General and Separate Account Funding	182	2,911,627	330	5,245,223	482	6,576,007	847	8,710,562	1202	11,598,039
a. General Account Portion	xxx	2,726,966	xxx	4,840,924	xxx	5,691,418	xxx	7,182,050	xxx	9,238,737
b. Separate Account Portion	xxx	184,661	xxx	404,304	xxx	884,589	xxx	1,528,512	xxx	2,359,302
1.3. Separate Account Funding Only	0	0	1	203	4	3,660	19	104,259	28	267,505
2. Totals	6503	17,062,550	7043	18,317,613	7564	19,947,252	8201	21,645,221	8751	23,017,197

(1) = Number of Contracts
 (2) = Reserves (000 omitted)

SOURCE: Responses to Study Questionnaire Form I-51, Table 1.

TABLE VI-29
 FUNDING MEDIA USED BY GROUP ANNUITY CONTRACTS
 1965 - 1969

Respondent Group II

	1965		1966		1967		1968		1969	
	(1)	(2)	(1)	(2)	(1)	(2)	(1)	(2)	(1)	(2)
1. Totals for All Outstanding Group Annuity Contracts										
1.1. General Account Funding Only	2523	1,304,170	2964	1,256,686	3361	1,360,061	3775	1,359,902	4218	1,411,139
1.2. Combined General and Separate Account Funding	42	265,565	85	456,519	158	524,219	262	702,883	610	895,752
a. General Account Portion	xxx	218,749	xxx	395,526	xxx	425,962	xxx	554,414	xxx	684,386
b. Separate Account Portion	xxx	46,816	xxx	60,993	xxx	98,257	xxx	148,469	xxx	211,366
1.3. Separate Account Funding Only	0	0	0	0	0	0	21	150	31	136
2. Totals	2570	1,569,735	3049	1,713,205	3519	1,884,280	4058	2,062,935	4859	2,307,027

(1) = Number of Contracts
 (2) = Reserves (000 omitted)

SOURCE: Responses to Study Questionnaire Form I-51, Table 1

TABLE VI-30
 FUNDING MEDIA USED BY GROUP ANNUITY CONTRACTS
 1965 - 1969

Respondent Group

III

	1965		1966		1967		1968		1969	
	(1)	(2)	(1)	(2)	(1)	(2)	(1)	(2)	(1)	(2)
1. Totals for All Outstanding Group Annuity Contracts										
1.1. General Account Funding Only	1472	696,263	1581	742,868	1713	807,192	1904	823,187	1896	883,905
1.2. Combined General and Separate Account Funding	41	81,844	70	143,828	110	195,949	162	322,521	230	417,278
a. General Account Portion	xxx	73,409	xxx	127,356	xxx	162,159	xxx	250,463	xxx	292,187
b. Separate Account Portion	xxx	8,435	xxx	16,471	xxx	33,790	xxx	72,058	xxx	125,091
1.3. Separate Account Funding Only	0	0	0	0	1	100	1	96	3	371
2. Totals	1513	778,107	1651	886,696	1824	1,003,241	2067	1,145,804	2129	1,301,554

(1) = Number of Contracts
 (2) = Reserves (000 omitted)

SOURCE: Responses to Study Questionnaire Form I-51, Table 1

TABLE VI-31
 FUNDING MEDIA USED BY GROUP ANNUITY CONTRACTS
 1965 - 1969

Respondent Group IV

	1965		1966		1967		1968		1969	
	(1)	(2)	(1)	(2)	(1)	(2)	(1)	(2)	(1)	(2)
1. Totals for All Outstanding Group Annuity Contracts										
1.1. General Account Funding Only	1238	545,397	1490	604,357	1714	666,254	1991	766,300	2305	812,719
1.2. Combined General and Separate Account Funding	25	36,851	57	135,430	86	203,549	150	281,775	245	385,961
a. General Account Portion	xxx	26,465	xxx	70,967	xxx	113,135	xxx	148,148	xxx	213,300
b. Separate Account Portion	xxx	10,386	xxx	64,413	xxx	90,414	xxx	133,627	xxx	172,661
1.3. Separate Account Funding Only	1	449	1	755	13	2,587	81	65,285	222	70,127
2. Totals	1264	582,697	1548	740,742	1813	872,390	2222	1,173,351	2772	1,268,807

(1) = Number of Contracts
 (2) = Reserves (000 omitted)

SOURCE: Responses to Study Questionnaire Form I-51, Table 1

TABLE VI-32
 FUNDING MEDIA USED BY GROUP ANNUITY CONTRACTS
 1965 - 1969

Respondent Group All Respondents

	1965		1966		1967		1968		1969	
	(1)	(2)	(1)	(2)	(1)	(2)	(1)	(2)	(1)	(2)
1. Totals for All Outstanding Group Annuity Contracts										
1.1. General Account Funding Only	11559	16,696,753	12747	15,676,293	13866	16,201,092	15005	15,778,789	15940	14,259,416
1.2. Combined General and Separate Account Funding	290	3,278,324	538	5,980,954	836	7,499,724	1421	10,017,741	2287	13,297,030
a. General Account Portion	xxx	3,045,589	xxx	5,434,773	xxx	6,392,674	xxx	8,135,075	xxx	10,428,610
b. Separate Account Portion	xxx	250,298	xxx	546,181	xxx	1,107,050	xxx	1,882,666	xxx	2,868,420
1.3. Separate Account Funding Only	1	449	2	958	18	6,347	122	169,790	284	338,139
2. Totals	11850	19,975,526	13287	21,658,205	14720	23,707,163	16548	25,966,320	18511	27,894,585

(1) = Number of Contracts
 (2) = Reserves (000 omitted)

SOURCE: Responses to Study Questionnaire Form I-51, Table 1

TABLE VI-33
SEPARATE ACCOUNTS AS FUNDING MEDIA FOR GROUP ANNUITY CONTRACTS
1965 - 1969

Respondent Group I

	Reserves (thousands of dollars)				
	1965	1966	1967	1968	1969
1. Separate Account Funding					
1.1. Affecting Employer Cost Only	142,987	298,582	658,798	1,204,111	1,978,030
1.2. Variable Benefits Based on Separate Account Investment Results (total)	3,228	35,760	83,799	126,316	156,320
a. Deferred Benefits	3,215	35,726	83,637	111,363	128,563
b. Benefits in Course of Payment	13	34	162	14,953	27,757
1.3. Variable Benefits Based on Index or Formula	0	0	0	15,004	35,680
2. Totals Reported Above	146,215	334,342	742,597	1,345,431	2,170,030
3. Total Separate Account Funding for All Outstanding Group Annuity Contracts (total)	184,661	404,507	888,249	1,632,771	2,626,807
3.1. Contracts with Separate Account Funding Only	0	203	3,660	104,259	267,505
3.2. Separate Account Portion of Contracts Combining Separate Account and General Account Funding	184,661	404,304	884,589	1,528,512	2,359,302
4. Discrepancy (3 minus 2)	38,446	70,165	145,652	287,340	456,777

SOURCE: Responses to Study Questionnaire, Form I-51, Table 1

TABLE VI-34
SEPARATE ACCOUNTS AS FUNDING MEDIA FOR GROUP ANNUITY CONTRACTS
1965 - 1969

Respondent Group II

	Reserves (thousands of dollars)				
	1965	1966	1967	1968	1969
1. Separate Account Funding					
1.1. Affecting Employer Cost Only	46,816	60,493	97,623	147,565	207,945
1.2. Variable Benefits Based on Separate Account Investment Results (total)	0	500	634	1,054	3,551
a. Deferred Benefits	0	500	634	1,002	3,431
b. Benefits in Course of Payment	0	0	0	52	120
1.3. Variable Benefits Based on Index or Formula	0	0	0	0	6
2. Totals Reported Above	46,816	60,993	98,257	148,619	211,502
3. Total Separate Account Funding for All Outstanding Group Annuity Contracts (total)	46,816	60,993	98,257	148,619	211,502
3.1. Contracts with Separate Account Funding Only	0	0	0	150	136
3.2. Separate Account Portion of Contracts Combining Separate Account and General Account Funding	46,816	60,993	98,257	148,469	211,366
4. Discrepancy (3 minus 2)	0	0	0	0	0

SOURCE: Responses to Study-Questionnaire, Form I-51, Table 1

TABLE VI-36
SEPARATE ACCOUNTS AS FUNDING MEDIA FOR GROUP ANNUITY CONTRACTS
1965 - 1969

Respondent Group IV

	Reserves (thousand of dollars)				
	1965	1966	1967	1968	1969
1. Separate Account Funding					
1.1. Affecting Employer Cost Only	9,972	63,892	90,710	164,346	204,485
1.2. Variable Benefits Based on Separate Account Investment Results (total)	449	755	1,817	28,845	32,228
a. Deferred Benefits	449	755	1,799	27,038	29,428
b. Benefits in Course of Payment	0	0	19	1,806	2,801
1.3. Variable Benefits Based on Index or Formula	0	0	0	0	0
2. Totals Reported Above	10,421	64,647	92,527	193,191	236,713
3. Total Separate Account Funding for All Outstanding Group Annuity Contracts (total)	10,835	65,168	93,001	198,912	242,788
3.1. Contracts with Separate Account Funding Only	449	755	2,587	65,285	70,127
3.2. Separate Account Portion of Contracts Combining Separate Account and General Account Funding	10,386	64,413	90,414	133,627	172,661
4. Discrepancy (3 minus 2)	414	521	474	5,721	6,075

SOURCE: Responses to Study Questionnaire, Form I-51, Table 1.

TABLE VI-37
SEPARATE ACCOUNTS AS FUNDING MEDIA FOR GROUP ANNUITY CONTRACTS
1965 - 1969

Respondent Group ALL RESPONDENTS

	Reserves (thousands of dollars)				
	1965	1966	1967	1968	1969
1. Separate Account Funding					
1.1. Affecting Employer Cost Only	207,139	439,407	880,207	1,585,220	2,509,970
1.2. Variable Benefits Based on Separate Account Investment Results (total)	3,695	37,046	87,064	159,171	198,051
a. Deferred Benefits	3,682	37,012	86,715	140,506	164,865
b. Benefits in Course of Payment	13	34	350	18,664	33,287
1.3. Variable Benefits Based on Index or Formula	0	0	0	15,004	35,686
2. Totals Reported Above	211,887	476,453	967,271	1,759,395	2,743,707
3. Total Separate Account Funding for All Outstanding Group Annuity Contracts (total)	250,747	547,139	1,113,397	2,052,456	3,206,559
3.1. Contracts with Separate Account Funding Only	449	958	6,347	169,790	338,139
3.2. Separate Account Portion of Contracts Combining Separate Account and General Account Funding	250,298	546,181	1,107,050	1,882,666	2,868,420
4. Discrepancy (3 minus 2)	38,860	70,686	146,126	293,061	462,852

SOURCE: Responses to Study Questionnaire, Form I-51, Table 1.

TABLE VI-38
LIFE INSURANCE GENERAL ACCOUNTS AS FUNDING MEDIA
FOR GROUP ANNUITY CONTRACTS
1965-1969

Respondent Group I

Reserves (thousands of dollars)

	1965	1966	1967	1968	1969
1. General Account Funding					
1.1 Fixed Benefits (total)	10,158,327	10,602,194	10,794,351	10,153,700	9,189,357
a. deferred	6,597,567	6,693,581	6,599,002	5,886,404	4,917,031
b. in course of payment	3,560,761	3,908,613	4,195,349	4,267,296	4,272,326
1.2 Unallocated Funds	2,421,689	2,706,334	3,216,587	4,170,107	5,332,668
1.3 Variable Benefits Based on Index or Formula	20,989	29,474	36,872	317,849	382,166
2. Totals Reported Above	12,601,005	13,338,002	14,047,810	14,641,656	14,904,191
3. Total General Account Funding for All Outstanding Group Annuity Contracts (total)	16,877,889	17,913,106	19,059,003	20,012,450	20,390,390
3.1 Contracts with General Account Funding Only	14,150,923	13,072,182	13,367,585	12,830,400	11,151,653
3.2 General Account Portion of Contracts Combining General Account & Separate Account Funding	2,726,966	4,840,924	5,691,418	7,182,050	9,238,737
4. Discrepancy (3-2)	4,276,884	4,575,104	5,011,193	5,370,794	5,486,199

SOURCE: Responses to Study Questionnaire, Form I-51, Table 1.

TABLE VI-39
LIFE INSURANCE GENERAL ACCOUNTS AS FUNDING MEDIA
FOR GROUP ANNUITY CONTRACTS
1965-1969

Respondent Group II

Reserves (thousands of dollars)

	1965	1966	1967	1968	1969
1. General Account Funding					
1.1 Fixed Benefits (total)	942,004	990,816	1,076,465	1,163,520	1,250,085
a. Deferred	510,864	514,023	535,827	551,012	554,394
b. in course of payment	431,140	476,793	540,638	612,508	695,691
1.2 Unallocated Funds	580,915	661,396	709,558	750,794	845,388
1.3 Variable Benefits Based on Index or Formula	0	0	0	2	52
2. Totals Reported Above	1,522,919	1,652,212	1,786,023	1,914,316	2,095,525
3. Total General Account Funding for All Outstanding Group Annuity Contracts (total)	1,522,919	1,652,212	1,786,023	1,914,316	2,095,525
3.1 Contracts with General Account Funding Only	1,304,170	1,256,686	1,360,061	1,359,902	1,411,139
3.2 General Account Portion of Contracts Combining General Account & Separate Account Funding	218,749	395,526	425,962	554,414	684,386
4. Discrepancy (3-2)	0	0	0	0	0

SOURCE: Responses to Study Questionnaire, Form I-51, Table 1.

TABLE VI-40
LIFE INSURANCE GENERAL ACCOUNTS AS FUNDING MEDIA
FOR GROUP ANNUITY CONTRACTS
1965-1969

Respondent Group III

Reserves (thousands of dollars)

	1965	1966	1967	1968	1969
1. General Account Funding					
1.1 Fixed Benefits (total)	306,130	336,511	353,281	385,428	422,851
a. deferred	150,834	154,842	143,400	141,258	134,174
b. in course of payment	155,296	181,670	209,881	244,171	288,677
1.2 Unallocated Funds	463,542	533,713	616,070	687,663	752,367
1.3 Variable Benefits Based on Index or Formula	0	0	0	559	874
2. Totals Reported Above	769,672	870,224	969,351	1,073,650	1,176,092
3. Total General Account Funding for All Outstanding Group Annuity Contracts (total)	769,672	870,224	969,351	1,073,650	1,176,092
3.1 Contracts with General Account Funding Only	696,263	742,868	807,192	823,187	883,905
3.2 General Account Portion of Contracts Combining General Account & Separate Account Funding	73,409	127,356	162,159	250,463	292,187
4. Discrepancy (3-2)	0	0	0	0	0

SOURCE: Responses to Study Questionnaire, Form I-51, Table 1.

TABLE VI-41
LIFE INSURANCE GENERAL ACCOUNTS AS FUNDING MEDIA
FOR GROUP ANNUITY CONTRACTS
1965-1969

Respondent Group IV

Reserves (thousands of dollars)

	1965	1966	1967	1968	1969
1. General Account Funding					
1.1 Fixed Benefits (total)	343,255	377,443	418,187	477,219	519,485
a. deferred	234,940	237,568	257,392	278,691	285,591
b. in course of payment	108,315	139,875	160,795	198,528	233,894
1.2 Unallocated Funds	228,522	294,896	354,261	422,329	486,241
1.3 Variable Benefits Based on Index or Formula	0	0	0	0	0
2. Totals Reported Above	571,777	672,339	772,448	899,548	1,005,726
3. Total General Account Funding for All Outstanding Group Annuity Contracts (total)	571,862	675,524	779,389	914,448	1,026,019
3.1 Contracts with General Account Funding Only	545,397	604,557	666,254	766,300	812,719
3.2 General Account Portion of Contracts Combining General Account & Separate Account Funding	26,465	70,967	113,135	148,148	213,300
4. Discrepancy (3-2)	85	3,185	6,941	14,900	20,293

SOURCE: Responses to Study Questionnaire, Form I-51, Table 1.

TABLE VI-42
LIFE INSURANCE GENERAL ACCOUNTS AS FUNDING MEDIA
FOR GROUP ANNUITY CONTRACTS
1965-1969

Respondent Group ALL RESPONDENTS

Reserves (thousands of dollars)

	1965	1966	1967	1968	1969
1. General Account Funding					
1.1 Fixed Benefits (total)	11,749,716	12,306,964	12,642,284	12,179,867	11,381,778
a. deferred	7,494,205	7,600,014	7,535,621	6,857,365	5,891,190
b. in course of payment	4,255,512	4,706,951	5,106,664	5,322,503	5,490,588
1.2 Unallocated Funds	3,694,668	4,196,339	4,896,476	6,030,893	7,416,664
1.3 Variable Benefits Based on Index or Formula	20,989	29,474	36,872	318,410	383,092
2. Totals Reported Above	15,465,373	16,532,777	17,575,632	18,529,170	19,181,534
3. Total General Account Funding for All Outstanding Group Annuity Contracts (total)	19,742,342	21,111,066	22,593,766	23,914,864	24,688,026
3.1 Contracts with General Account Funding Only	16,696,753	15,676,293	16,201,092	15,779,789	14,259,416
3.2 General Account Portion of Contracts Combining General Account & Separate Account Funding	3,045,589	5,434,773	6,392,674	8,135,075	10,428,610
4. Discrepancy (3-2)	4,276,969	4,578,289	5,018,134	5,385,694	5,506,492

SOURCE: Responses to Study Questionnaire, Form I-51, Table 1

TABLE VI-43

NUMBER OF CONTRACTS OUTSTANDING WITH VARIABLE BENEFITS AS OF
DECEMBER 31, 1969

By Respondent Group

Type of Variable Benefit	Respondent Group:			
	I	II	III	IV
Based on Separate Account Investment Results	10	183	15	243
Based on Index or Formula				
a. general account funding	6	3	1	0
b. separate account funding	2	1	0	0

SOURCE: Responses to Study Questionnaire Form I-51, Table 1.

TABLE VI-44

NUMBER OF COMPANIES REPORTING GROUP VARIABLE
BENEFIT ANNUITY CONTRACTS IN FORCE AS OF
DECEMBER 31, 1969

By Respondent Group

Type of Variable Benefit	Respondent Group			
	I	II	III	IV
Based on Separate Account Investment Results	3	2	3	6
Based on Index or Formula				
a. general account funding	2	2	1	0
b. separate account funding	1	1	0	0
Total Number of Different Companies Reported Above	4	2	3	6
Total Number of All Respondents	6	4	5	25

SOURCE: Responses to Study Questionnaire Form I-51, Table 1.

TABLE VI-45

GROUP VARIABLE ANNUITY CONTRACT BENEFITS OFFERED BY
RESPONDENT COMPANIES:

YEAR IN WHICH CONTRACT INITIALLY OFFERED

Year Initially Offered	Respondent Group			
	I	II	III	IV
1964	1	0	1	0
1965	1	0	0	1
1966	1	0	0	1
1967	3	2	1	2
1968	0	0	0	4
1969	0	2	2	5
Plan to Offer Soon	N.A.	N.A.	1	3
Do Not Offer	0	0	0	9
TOTALS	6	4	5	25

* Includes one respondent initially offering such contracts in the first quarter of 1970. Offerings later in 1970 are not reflected.

N.A. means not applicable.

SOURCE: Responses to Study Questionnaire, Form I-51, Table 1.

TABLE VI-46

GROUP ANNUITY AGREEMENTS
NEWLY ISSUED DURING 1968-1969
BY RESPONDENT GROUP I

	(1) Number of New Cases	(2) Estimated Annual Contributions (dollars)
I. Originator		
1.1. Respondent companies' personnel (agents, sales representatives etc.)	<u>190</u>	<u>80,538,761</u>
1.2. Another insurance company's personnel	<u>3</u>	<u>326,996</u>
1.3. Bank, investment advisor or other financial institution	<u>0</u>	<u>0</u>
1.4. Consulting firm (consulting actuary, insurance broker, employee-benefit firm, etc.)	<u>117</u>	<u>39,557,187</u>
1.5. Other sources	<u>0</u>	<u>0</u>
II. Previous History		
2.1. Newly created pension or other employee benefit plans	<u>184</u>	<u>78,807,833</u>
2.2. Plans for which your company represents an addition to other funding agents	<u>40</u>	<u>11,236,961</u>
2.3. Plans removed from other in- surance companies	<u>25</u>	<u>4,421,924</u>
2.4. Plans removed from banks or other noninsurance funding agents	<u>59</u>	<u>25,726,226</u>
2.5. Other	<u>2</u>	<u>230,000</u>

	(1) Number of New Cases	(2) Estimated Annual Contributions (dollars)
III. Contractual Services Provided by Respondent Companies		
3.1. General Account funding	<u>276</u>	<u>57,379,471</u>
3.2. Separate Account funding	<u>155</u>	<u>103,393,928</u>
3.3. Maintains records on individual participants	<u>110</u>	<u>72,381,306</u>
3.4. Life income guarantees to plan participants	<u>272</u>	<u>102,739,978</u>
3.5. Actuarial services	<u>214</u>	<u>34,088,714</u>
3.6. Other major services	<u>16</u>	<u>8,896,864</u>
IV. Total retirement-benefit plans reported on above	<u>310</u>	<u>120,422,944</u>
V. Total: <u>all</u> plans <u>new</u> to respondent companies	<u>1,312</u>	<u>159,671,812</u>

TABLE VI-47.

GROUP ANNUITY AGREEMENTS
NEWLY ISSUED DURING 1963-1969
BY RESPONDENT GROUP II

	(1) Number of New Cases	(2) Estimated Annual Contributions (dollars)
I. Originator		
1.1. Respondent companies' personnel (agents, sales representatives etc.)	<u>356</u>	<u>15,335,573</u>
1.2. Another insurance company's personnel	<u>87</u>	<u>1,453,018</u>
1.3. Bank, investment adviser or other financial institution	<u>0</u>	<u>0</u>
1.4. Consulting firm (consulting actuary, insurance broker, employee-benefit firm, etc.)	<u>466</u>	<u>11,954,101</u>
1.5. Other sources	<u>6</u>	<u>152,895</u>
II. Previous History		
2.1. Newly created pension or other employee benefit plans	<u>782</u>	<u>17,635,694</u>
2.2. Plans for which your company represents an addition to other funding agents	<u>7</u>	<u>648,691</u>
2.3. Plans removed from other in- surance companies	<u>49</u>	<u>2,535,048</u>
2.4. Plans removed from banks or other noninsurance funding agents	<u>55</u>	<u>4,010,711</u>
2.5. Other	<u>22</u>	<u>4,065,443</u>

	(1) Number of New Cases	(2) Estimated Annual Contributions (dollars)
III. Contractual Services Provided by Respondent Companies		
3.1. General Account funding	<u>915</u>	<u>28,895,587</u>
3.2. Separate Account funding	<u>151</u>	<u>11,527,174</u>
3.3. Maintains records on individual participants	<u>778</u>	<u>20,050,613</u>
3.4. Life income guarantees to plan participants	<u>913</u>	<u>29,079,992</u>
3.5. Actuarial services	<u>781</u>	<u>22,983,616</u>
3.6. Other major services	<u>0</u>	<u>0</u>
IV. Total retirement-benefit plans reported on above	<u>915</u>	<u>28,895,587</u>
V. Total: <u>all</u> plans <u>new</u> to respondent companies	<u>1,554</u>	<u>44,302,661</u>

TABLE VI-48

GROUP ANNUITY AGREEMENTS
NEWLY ISSUED DURING 1968-1969
BY RESPONDENT GROUP III

	(1) Number of New Cases	(2) Estimated Annual Contributions (dollars)
I. Originator		
1.1. Respondent companies' personnel (agents, sales representatives etc.)	<u>154</u>	<u>6,226,125</u>
1.2. Another insurance company's personnel	<u>6</u>	<u>125,944</u>
1.3. Bank, investment adviser or other financial institution	<u>3</u>	<u>90,375</u>
1.4. Consulting firm (consulting actuary, insurance broker, employee-benefit firm, etc.)	<u>137</u>	<u>9,569,048</u>
1.5. Other sources	<u>1</u>	<u>154,281</u>
II. Previous History		
2.1. Newly created pension or other employee benefit plans	<u>203</u>	<u>9,577,225</u>
2.2. Plans for which your company represents an addition to other funding agents	<u>7</u>	<u>564,265</u>
2.3. Plans removed from other in- surance companies	<u>35</u>	<u>1,316,078</u>
2.4. Plans removed from banks or other noninsurance funding agents	<u>38</u>	<u>3,498,497</u>
2.5. Other	<u>18</u>	<u>1,209,708</u>

	(1) Number of New Cases	(2) Estimated Annual Contributions (dollars)
III. Contractual Services Provided by Respondent Companies		
3.1. General Account funding	<u>298</u>	<u>15,485,773</u>
3.2. Separate Account funding	<u>60</u>	<u>7,952,657</u>
3.3. maintains records on individual participants	<u>206</u>	<u>8,341,116</u>
3.4. Life income guarantees to plan participants	<u>293</u>	<u>14,344,822</u>
3.5. Actuarial services	<u>250</u>	<u>10,628,929</u>
3.6. Other major services	<u>155</u>	<u>7,067,312</u>
IV. Total retirement benefit plans reported on above	<u>301</u>	<u>16,165,773</u>
V. Total: all plans rep to respondent companies	<u>301</u>	<u>16,165,773</u>

TABLE VI-49

GROUP ANNUITY AGREEMENTS
NEWLY ISSUED DURING 1968-1969
BY RESPONDING GROUP IV

	(1) - Number of New Cases	(2) Estimated Annual Contributions (dollars)
I. Originator		
1.1. Respondent companies' personnel (agents, sales representatives etc.)	<u>570</u>	<u>23,914,802</u>
1.2. Another insurance company's personnel	<u>37</u>	<u>984,805</u>
1.3. Bank, investment adviser or other financial institution	<u>1</u>	<u>28,652</u>
1.4. Consulting firm (consulting actuary, insurance broker, employee-benefit firm, etc.)	<u>148</u>	<u>4,899,151</u>
1.5. Other sources	<u>18</u>	<u>2,313,636</u>
II. Previous History		
2.1. Newly created pension or other employee benefit plans	<u>642</u>	<u>13,472,955</u>
2.2. Plans for which your company represents an addition to other funding agents	<u>31</u>	<u>2,069,968</u>
2.3. Plans removed from other in- surance companies	<u>33</u>	<u>1,789,097</u>
2.4. Plans removed from banks or other noninsurance funding agents	<u>33</u>	<u>11,980,409</u>
2.5. Other	<u>35</u>	<u>2,828,617</u>

	(1) Number of New Cases <hr/>	(2) Estimated Annual Contributions (dollars) <hr/>
III. Contractual Services Provided by Respondent Companies		
3.1. General Account funding	<u>608</u>	<u>20,561,475</u>
3.2. Separate Account funding	<u>297</u>	<u>17,526,504</u>
3.3. Maintains records on individual participants	<u>565</u>	<u>12,532,115</u>
3.4. Life income guarantees to plan participants	<u>755</u>	<u>19,224,433</u>
3.5. Actuarial services	<u>681</u>	<u>16,554,975</u>
3.6. Other major services	<u>50</u>	<u>3,176,832</u>
IV. Total retirement-benefit plans reported on above	<u>774</u>	<u>32,141,046</u>
V. Total: <u>all</u> plans <u>new</u> to respondent companies	<u>888</u>	<u>34,532,178</u>

TABLE VI-50

GROUP ANNUITY AGREEMENTS
NEWLY ISSUED DURING 1968-1969
BY RESPONDENT GROUP
ALL RESPONDENTS

	(1) - Number of New Cases	(2) Estimated Annual Contributions (dollars)
I. Originator		
1.1. Respondent companies' personnel (agents, sales representatives etc.)	<u>1,270</u>	<u>126,015,261</u>
1.2. Another insurance company's personnel	<u>133</u>	<u>2,890,763</u>
1.3. Bank, investment adviser or other financial institution	<u>4</u>	<u>119,027</u>
1.4. Consulting firm (consulting actuary, insurance broker, employee-benefit firm, etc.)	<u>868</u>	<u>65,979,487</u>
1.5. Other sources	<u>25</u>	<u>2,620,812</u>
II. Previous History		
2.1. Newly created pension or other employee benefit plans	<u>1,811</u>	<u>119,493,707</u>
2.2. Plans for which your company represents an addition to other funding agents	<u>85</u>	<u>14,519,885</u>
2.3. Plans removed from other in- surance companies	<u>142</u>	<u>10,062,147</u>
2.4. Plans removed from banks or other noninsurance funding agents	<u>185</u>	<u>45,215,843</u>
2.5. Other	<u>77</u>	<u>8,333,768</u>

	(1) Number of New Cases	(2) Estimated Annual Contributions (dollars.)
III. Contractual Services Provided by Respondent Companies		
3.1. General Account funding	<u>2,097</u>	<u>122,322,306</u>
3.2. Separate Account funding	<u>663</u>	<u>140,400,263</u>
3.3. Maintains records on individual participants	<u>1,659</u>	<u>113,305,150</u>
3.4. Life income guarantees to plan participants	<u>2,233</u>	<u>165,389,225</u>
3.5. Actuarial services	<u>1,926</u>	<u>84,256,234</u>
3.6. Other major services	<u>221</u>	<u>19,141,008</u>
IV. Total retirement-benefit plans reported on above	<u>2,300</u>	<u>197,625,350</u>
V. Total: <u>all</u> plans <u>new</u> to respondent companies	<u>4,055</u>	<u>254,672,424</u>

TABLE VI-51

Percentage of New Cases by Number and by Contributions Which
Use Insurers' Actuarial Services

Respondent Group	Number of Cases		Expected Annual Contributions	
	Weighted	Unweighted	Weighted	Unweighted
1) I and II (25 cases)	42%	42%	14%	31%
2) I and II (all cases)	86	86	80	82
3) III	83	82	66	69
4) IV	88	85	52	75
5) All respondents	84	80	43	69

Note: Row (1) consists of the five Group I and Group II companies which reported on only their twenty-five largest new cases. Row (2) consists of the five Group I and Group II companies which reported on all new cases.

Source: Tables VI-46 to VI-50, and responses to Study Questionnaire Form I-51, Table 3.

TABLE VI-52

TERMINATIONS IN GROUP
ANNUITY BUSINESSES
1968-1969

By Respondent Group I

	(1) Number of Plans Affected	(2) Reduction in Annual Contributions (dollars)
I. Reasons for Termination or Reduction		
1.1. Client desired to replace insured contract with trusteed plan.	<u>89</u>	<u>15,788,445</u>
1.2. Client desired to shift the contract to another insurer.	<u>43</u>	<u>4,838,771</u>
1.3. Client desired to adopt (or further) split funding; respondent company remains a funding agent.	<u>5</u>	<u>852,443</u>
1.4. Employer consolidating management of employee-benefit plans following a merger.	<u>37</u>	<u>1,730,540</u>
1.5. Plan itself was terminated; no successor plan established.	<u>36</u>	<u>1,163,863</u>
1.6. Other	<u>5</u>	<u>93,847</u>

	(1) Number of Plans Affected	(2) Reduction in Annual Contributions (dollars)
II. Services Provided (or which had been provided) by Respondent Companies		
2.1. General Account funding	<u>194</u>	<u>23,471,263</u>
2.2. Separate Account funding	<u>23</u>	<u>9,966,263</u>
2.3. Maintained records on individual participants	<u>114</u>	<u>10,842,434</u>
2.4. Life income guarantees to plan participants	<u>200</u>	<u>20,333,607</u>
2.5. Actuarial services	<u>152</u>	<u>13,700,603</u>
2.6. Other major services	<u>21</u>	<u>2,652,834</u>
III. Totals		
3.1. Total plans reported on above	<u>215</u>	<u>24,467,909</u>
3.2. Total plans terminated or reduced during 1968-1969	<u>427</u>	<u>27,054,952</u>

TABLE VI-53

TERMINATIONS IN GROUP
ANNUITY BUSINESS
1968-1969

By Respondent Group II

	(1) Number of Plans Affected	(2) Reduction in Annual Contributions (dollars)
I. Reasons for Termination of Reduction		
1.1. Client desired to replace insured contract with trusteed plan.	<u>34</u>	<u>3,345,609</u>
1.2. Client desired to shift the contract to another insurer.	<u>28</u>	<u>696,606</u>
1.3. Client desired to adopt (or further) split funding; ' respondent company remains a funding agent.	<u>2</u>	<u>116,197</u>
1.4. Employer consolida- ting management of employee-benefit plans following a merger.	<u>30</u>	<u>545,839</u>
1.5. Plan itself was terminated; no successor plan established.	<u>77</u>	<u>927,042</u>
1.6. Other	<u>11</u>	<u>208,142</u>

	(1) Number of Plans Affected	(2) Reduction in Annual Contributions (Dollars)
II. Services Provided (or which had been provided) by Respondent Companies		
2.1. General Account funding	<u>182</u>	<u>4,839,435</u>
2.2. Separate Account funding	<u>12</u>	<u>658,430</u>
2.3. Maintained records on individual participants	<u>154</u>	<u>3,470,776</u>
2.4. Life income guarantees to plan participants	<u>182</u>	<u>4,839,435</u>
2.5. Actuarial services	<u>128</u>	<u>2,473,208</u>
2.6. Other major services	<u>0</u>	<u>0</u>
III. Totals		
3.1. Total plans reported on above	<u>182</u>	<u>4,839,435</u>
3.2. Total plans terminated or reduced during 1968-1969	<u>182</u>	<u>4,839,435</u>

TABLE VI-54

TERMINATIONS IN GROUP
ANNUITY BUSINESS
1966-1969

By Respondent Group III

	(1) Number of Plans <u>Affected</u>	(2) Reduction in Annual Contributions <u>(dollars)</u>
I. Reasons for Termination or Reduction		
1.1. Client desired to replace insured contract with trusteed plan.	<u>60</u>	<u>2,935,458</u>
1.2. Client desired to shift the contract to another insurer.	<u>26</u>	<u>792,055</u>
1.3. Client desired to adopt (or further) split funding; respondent company remains a funding agent.	<u>1</u>	<u>14,400</u>
1.4. Employer consolida- ting management of employee-benefit plans following a merger.	<u>33</u>	<u>1,599,328</u>
1.5. Plan itself was terminated; no successor plan established.	<u>59</u>	<u>635,695</u>
1.6. Other	<u>0</u>	<u>0</u>

	(1) Number of Plans <u>Affected</u>	(2) Reduction in Annual Contributions <u>(dollars)</u>
II. Services Provided (or which had been provided) by Respondent Companies		
2.1. General Account funding	<u>175</u>	<u>5,621,636</u>
2.2. Separate Account funding	<u>7</u>	<u>428,300</u>
2.3. Maintained records on individual participants	<u>129</u>	<u>2,904,804</u>
2.4. Life income guarantees to plan participants	<u>179</u>	<u>5,976,036</u>
2.5. Actuarial services	<u>164</u>	<u>4,231,086</u>
2.6. Other major services	<u>31</u>	<u>1,257,653</u>
III. Totals		
3.1. Total plans reported on above	<u>179</u>	<u>5,976,936</u>
3.2. Total plans terminated or reduced during 1968-1969	<u>179</u>	<u>5,976,936</u>

TABLE VI-55
 TERMINATIONS IN GROUP
 ANNUITY BUSINESS
 1968-1969

By Respondent Group IV

	(1) Number of Plans Affected	(2) Reduction in Annual Contributions (dollars)
I. Reasons for Termination or Reduction		
1.1. Client desired to replace insured contract with trusteed plan.	<u>33</u>	<u>1,429,333</u>
1.2. Client desired to shift the contract to another insurer.	<u>17</u>	<u>1,733,862</u>
1.3. Client desired to adopt (or further) split funding; respondent company remains a funding agent.	<u>5</u>	<u>480,235</u>
1.4. Employer consolida- ting management of employee-benefit plans following a merger.	<u>23</u>	<u>1,126,206</u>
1.5. Plan itself was terminated; no successor plan established.	<u>13</u>	<u>140,914</u>
1.6. Other	<u>3</u>	<u>32,016</u>

TABLE VI-56

TERMINATIONS IN GROUP
ANNUITY BUSINESS
1968-1969

By Respondent Group	All Respondents		
		(1) Number of Plans Affected	(2) Reduction in Annual Contributions (dollars)
I. Reasons for Termination or Reduction			
1.1. Client desired to replace insured contract with trusteed plan.		216	22,498,845
1.2. Client desired to shift the contract to another insurer.		114	8,061,294
1.3. Client desired to adopt (or further) split funding; respondent company remains a funding agent.		13	1,463,275
1.4. Employer consolida- ting management of employee-benefit plans following a merger.		123	5,001,913
1.5. Plan itself was terminated; no successor plan established.		185	2,867,514
1.6. Other		19	334,005

	(1) Number of Plans Affected	(2) Reduction in Annual Contributions (dollars)
II. Services Provided (or which had been provided) by Respondent Companies		
2.1. General Account funding	<u>645</u>	<u>38,874,301</u>
2.2. Separate Account funding	<u>51</u>	<u>11,746,441</u>
2.3. Maintained records on individual participants	<u>466</u>	<u>20,361,696</u>
2.4. Life income guarantees to plan participants	<u>650</u>	<u>35,443,548</u>
2.5. Actuarial services	<u>533</u>	<u>24,886,964</u>
2.6. Other major services	<u>54</u>	<u>3,945,487</u>
III. Totals		
3.1. Total plans reported on above	<u>670</u>	<u>40,226,846</u>
3.2. Total plans terminated or reduced during 1968-1969	<u>882</u>	<u>42,813,991</u>

TABLE VI-57

Group Annuity Business:
Newly Issued and Terminated
1968-1969

Respondent Group	New Cases		Lost Cases		Net New Cases	
	(\$mil.)	(%)	(\$mil.)	(%)	(\$mil.)	(%)
I	160	63	27	63	133	63
II	44	17	5	11	39	18
III	16	6	6	14	10	5
IV	35	14	5	12	30	14
All Respondents	255	100	43	100	212	100

Note: Net new cases equals gross new cases less lost cases.

Source: TABLES VI-46 to VI-50 and VI-52 to VI-56.

TABLE VI-58

Percentage of Lost Contributions
 Attributable to the Removal of
 Assets or Contributions to
 Other Funding Agents

Respondent Group	Number of Plans (%)	Amount of Contributions Lost (%)
I	64	88
II	35	65
III	49	63
IV	59	74
All Respondents	51	80

Source: Tables VI-52 to VI-56. Percentages are computed as the ratio of the sum of items 1.1, 1.2 and 1.3 to items 3.1 in the respective tables.

TABLE VI-59

Summary of Net New Group Annuity
Business by Source of New
Business and Reasons for Loss of Business
1968-1969: All Respondents

Reason for Acquisition or Loss	Number of Cases		Impact on Contributions*	
	New	Lost	New	Lost
Split funding	85	13	14.5	1.5
Shifts among insurers	142	114	10.1	8.1
Shifts between banks, etc. and insurers	185	216	45.2	22.5
Plan newly created or terminated or absorbed in merger	1,811	308	119.5	7.9
Other	77	19	8.3	0.3
TOTALS	2,300	670	197.6	40.2

* millions of dollars.

Source: Tables VI-52 and VI-56.

TABLE VI-60

Summary of Net New Group Annuity
Business by Source of New
Business and Reasons for Loss of Business
1968-1969: Group I Respondents

Reason for Acquisition or Loss	Number of Cases		Impact on Contributions*	
	New	Lost	New	Lost
Split funding	40	5	11.2	.9
Shifts among insurers	25	43	4.4	4.8
Shifts between banks, etc. and insurers	59	89	25.7	15.8
Plan newly created or terminated or absorbed in merger	184	73	78.8	2.9
Other	2	5	.2	.1
TOTALS	310	215	120.4	24.5

* millions of dollars

Source: Tables VI-46 and VI 52.

TABLE VI-61

Summary of Net New Group Annuity
Business by Source of New
Business and Reasons for Loss of Business
1968-1969: Respondent Groups II, III, IV

Reason for Acquisition or Loss	Number of Cases		Impact on Contributions*	
	New	Lost	New	Lost
Split funding	45	8	3.3	.6
Shifts among insurers	117	71	5.7	3.3
Shifts between banks, etc. and insurers	126	127	19.5	6.7
Plan newly created or terminated or absorbed in merger	1,627	235	40.7	5.0
Other	75	14	8.1	.2
TOTALS	1,990	455	77.2	15.7

* millions of dollars.

Source: Tables VI-47 to VI-49 and VI-53 to VI-55.

TABLE VI-62

Services Provided by Respondent Insurers
To Newly Acquired Group Annuity Cases
and to Terminated or Reduced Cases
1968-1969: All Respondents

Type of Service	Percentage of New (Lost) Business Provided Service			
	Number of Cases		Contributions	
	New (%)	Lost (%)	New (%)	Lost (%)
1.. General Account Funding	91	96	62	97
2. Separate Account Funding	29	8	71	29
3. Maintain Records on Plan Participants	72	70	57	51
4. Life Income Guarantee to Plan Participants	97	97	84	88
5. Actuarial Services	84	80	43	62
6. Other Services	10	8	10	10

Source: Computed from data in Tables VI-50 and VI-56.

TABLE VI-63

Services Provided by Respondent Insurers to
Newly Acquired Group Annuity Cases
and to Terminated or Reduced Cases
1968-1969: Group I Respondents

Type of Service	Percent of New (Lost) Business Provided Service			
	Number of Cases		Contributions	
	New (%)	Lost (%)	New (%)	Lost (%)
1. General Account Funding	89	90	48	96
2. Separate Account Funding	50	11	86	41
3. Maintain Records on Plan Partici- pants	36	53	60	44
4. Life Income Guarantees to Plan Participants	88	93	85	83
5. Actuarial Services	69	71	28	56
6. Other Services	5	10	7	11

Source: Computed from data in Table VI-46 and VI-52.

TABLE VI-64

Services Provided by Respondent Insurers to Newly
Acquired Group Annuity Cases and To
Terminated or Reduced Cases
1968-1969: Respondent Groups II, III and IV

Type of Service	Percent of New (Lost) Business Provided Service			
	Number of Cases		Contributions	
	New (%)	Lost (%)	New (%)	Lost (%)
1. General Account Funding	92	99	84	98
2. Separate Account Funding	26	6	48	11
3. Maintain Records or Plan Participants	78	77	53	60
4. Life Income Guarantees to Plan Participants	99	99	81	96
5. Actuarial Services	86	84	65	71
6. Other Services	10	7	13	8

Source: Computed from data in Tables VI-47 to VI-49
and VI-53 to VI-55.

E. SEPARATE ACCOUNTS: THEIR DEVELOPMENT, GROWTH, CHARACTERISTICS
AND MANAGEMENT FEES

1. The Development of Separate Accounts

a. The concept and rationale

As explained above, separate investment accounts have been established by insurers primarily for the purpose of funding pension and profit-sharing plans. In particular, separate accounts are being utilized by employers as investment vehicles for employer contributions in the expectation that favorable investment results will accrue over the long run and thereby reduce the employer's cost of funding retirement benefits for employees. To a limited extent, employee contributions are invested in separate accounts and, also in a limited way, some accounts are being utilized as investment media for group and individual contracts which provide for payment of variable benefits to designated beneficiaries, these benefits usually varying directly with the investment results of the account.²²⁵ It is reasonable to expect that the separate account mechanism will be utilized in a major way in future years for purposes of funding life insurance contracts in which the level of benefits vary with the return on a dedicated investment account.²²⁶

"Separate account" has been defined by the Securities and Exchange Commission to mean "an account established and maintained by an insurance company pursuant to the law of any state or territory of the United States or of Canada or any province thereof, under which income, gains and losses, whether or not realized, from assets allocated to such account, are, in accordance with the applicable contract, credited to or charged against such account without regard to other income, gains or losses of the insurance company."²²⁷ The Commission has limited the availability of exemptions under the Investment Company Act to separate accounts which meet further conditions with respect to segregation of assets in separate accounts. State enabling statutes also contain language specifying the standards of income and asset segregation required for separate accounts.²²⁸

Separate accounts can be used to provide portfolios with investment policies and practices appropriately tailored to the objectives of the contractholders who have interests in the accounts. In principle, bond and mortgage loan separate accounts can be developed to tailor the fixed income portion of contractholders' investment interests to their objectives. In practice, although some debt obligation separate accounts have been established, separate accounts have been created primarily for the purpose of providing equity funding.

As noted above the first state authorizations of separate accounts occurred in 1959 with enactment of the Connecticut and New Jersey enabling statutes.²²⁹ New York granted statutory permission in 1962,²³⁰ and now all states except North Dakota permit separate ac-

²²⁵ In a few instances, index or formula payout contracts are funded in separate accounts. See above Tables VI-33 to VI-37.

²²⁶ See sec. C.3 dealing with the prospects for variable life insurance.

²²⁷ Investment Company Act of 1940, rule O-1 (e).

²²⁸ See, e.g. N.Y. Ins. Law § 227 (McKinney 1966).

²²⁹ See Gen. Stat., of Conn. sec. 38-33a and N.J. Stat. Ann § 17:35A-1 *et seq.*

²³⁰ See N.Y. Ins. Law § 227 (McKinney 1966).

counts to be established for some purposes.²³¹ Many of the initial statutes were quite restrictive with respect to the types of interests which could be funded in separate accounts. It was common to limit the use of separate accounts to interests of pension, retirement or profit-sharing plans and in some states to only tax-qualified plans. Only assets funding fixed income benefit payments could be funded in separate accounts in some states, and some states prohibited the allocation of employee contributions to separate accounts. Most of these restrictive provisions have been liberalized so that it is now possible to use separate account funding for non-qualified plans and for individual and group variable annuities and generally employee contributions can be allocated to separate accounts.

As explained above (sec. D.3.b.), beginning in January 1963 the Securities and Exchange Commission provided administrative exemptions from the Investment Company Act and the Securities Act for most separate accounts (and interests in those accounts) which were used to fund tax-qualified pension or profit-sharing plans. Until recently, separate accounts funding individual annuity contracts, or contracts issued under Section 403(b) of the Internal Revenue Code, H.R. 10 plans, or non-qualified pension or profit-sharing plans were required to register under the Investment Company Act (except where "no action" letters were received). However, the recently enacted Investment Company Amendments Act of 1970 has generally provided statutory exemptions which encompass H.R. 10 plan contracts insofar as the Investment Company Act is concerned and moots Commission Rules 3c-3 and 6e-1 with respect to qualified pension-benefit plans.²³²

This section provides a description of the growth of and use made of separate accounts, and a profile of the size, age, investment intentions and other characteristics of separate accounts in existence as of year-end 1969. This descriptive analysis provides insight into the extent to which separate accounts invest in common stocks and examines the effect of the age, size and other characteristics of separate accounts upon the proportion of an account's assets which are invested in common stock. Finally the section explores the impact of separate account management upon traditional views of the investment responsibilities of life insurers and provides an analysis of the scale of investment management fees charged to separate accounts by insurers.

b. Characteristics of sampled accounts

(1) *An overview.*—The Study received information on 197 separate accounts.²³³ These accounts can be usefully distinguished according to (1) whether or not the account is registered under the Investment Company Act of 1940, and (2) whether the account commingles the assets of a number of contractholders or is established solely for an individual group annuity contractholder.²³⁴ All registered accounts are commingled accounts.

²³¹ Separate account legislation is expected to be introduced in the North Dakota Legislature in 1971.

²³² See ch. VIII.B.8 for a more complete discussion of the history of Commission action with respect to separate accounts.

²³³ In addition, the separate account questionnaire package was completed by the College Retirement Equities Fund (CREF) which serves an economic function very similar to separate accounts. Thus, CREF is treated as if it were a separate account in some of the analyses that follow.

²³⁴ An individual contractholder may represent many interests as, for example, in the case of a pension plan jointly funded by a labor union and a number of employers.

As Table VI-65 shows, these 197 accounts held assets of \$3.65 billion of which \$2.76 billion were invested in common stocks.²³⁵ These accounts include the bulk of separate account assets reported by the Institute of Life Insurance.²³⁶ A significant number of registered separate accounts appear to exist outside of this reporting sample, and the sample covers only about 46 percent of registered account assets,²³⁷ but the reporting accounts include nearly 99 percent of the unregistered separate accounts in U.S. companies.

²³⁵ All asset data for separate accounts reported in this section represent market valuation as of December 31, 1969. Because of its size (\$1.3 billion in assets) and the fact that it is not customarily regarded as a separate account, CREF is excluded from this and other descriptive tables that follow.

²³⁶ The ILI reports separate account assets of U.S. insurers of \$3.62 billion at end-1969; \$3.44 billion of the assets reported in Table VI-65 represent assets of U.S. companies. The remainder are from Canadian insurers.

²³⁷ The Commission reported 39 "variable annuity—separate accounts" with \$261 million in assets registered as open-end investment companies as of June 30, 1969 and an additional 10 (with \$3 million in assets) registered "variable annuity—separate accounts" organized as unit investment trusts. (35 SEC Annual Report 125 (1969)). The 31 registered accounts reporting to the Study accounted for \$119 million in assets. The largest part of the unreported assets are with the Variable Annuity Life Insurance Company which did not complete the Study's separate account questionnaire. As of June 30, 1970, 49 open-end investment company separate accounts with \$224 million in assets and 21 unit investment trusts with \$7 million of assets were registered.

Table VI-65

Assets and Common Stock Holdings
of Reporting Separate Accounts
by Type of Account
as of December 31, 1969

Account Type	Number of Accounts	Assets	Common Stocks
Registered	31	\$ 119,486,187	\$ 94,992,426
Non-Registered Commingled	70	\$2,345,209,653	\$1,853,197,549
Single Client	96	\$1,187,956,919	\$ 815,047,694
TOTALS	197	\$ 3,652,652,759	\$ 2,763,237,669

SOURCE: Response to Study Questionnaire Form I-50.

Only 31 of the 197 accounts representing just 2.4 percent of the reporting separate account assets are registered under the Investment Company Act.²³⁸ Insurers apparently were confident that all their single client accounts and most of their commingled accounts qualified for the exemptions provided under Rule 3c-3 or Rule 6e-1.²³⁹

The data reported in Table VI-65 include one registered account of a Canadian company with assets of \$1.2 million, 12 non-registered commingled accounts from four Canadian companies with assets of \$147 million and seven single client accounts with assets of \$67 million from two Canadian companies. Of the remaining \$3.4 billion of assets attributable to U.S. companies, six domestic U.S. companies, each holding separate account assets of over \$200 million, had 87 percent (\$2.97 billion) of the \$3.4 billion.²⁴⁰

All life insurance company officers questioned on the point in interviews indicated that they discouraged clients from establishing "separate" separate accounts, preferring that group pension customers utilize existing commingled accounts in order to minimize the number of accounts under management.²⁴¹ In view of this attitude, it is interesting to observe from Table VI-65 that nearly half the accounts (with one-third of the reported assets) are single client accounts.

²³⁸ Registered account assets accounted for about seven percent of all separate account assets in U.S. insurers as of year-end 1969. Throughout this report the two accounts of the Participating Annuity Life Insurance Company (PALIC) are considered registered accounts even though in this case it is the company itself, rather than the individual accounts, which is registered.

²³⁹ Rule 6e-1 which provided exemption from registration requirements and from some other provisions of the Investment Company Act (see above) was released on July 15, 1969. As of year-end 1969, 16 accounts had filed under Rule 6e-1, of which 15 are included in Table VI-65. An additional nine accounts filed under 6e-1 during the first half of 1970. Assets of all accounts claiming exemption pursuant to Rule 6e-1 amounted to \$710 million as of June 30, 1970.

²⁴⁰ These are the largest six companies in the group annuity business and constitute the Group I companies in the analysis of the group annuity business reported in sec. D above.

²⁴¹ The largest number of separate accounts reported under management by a single investment department of a single company was 20. Companies often require that net annual contributions ("new money inflow") must exceed a stated minimum in order for the insurer to comply with an employer's request for an individual separate account. The highest such minimum encountered in interviews was \$10 million a year in net contributions.

Table VI-66

Types of Contracts Funded in Separate Accounts
as of December 31, 1969
Assets by Account Category
(dollars)

	Registered Accounts	Non- registered Commingled Accounts	Single Client Accounts	Totals
Number of Accounts	25	52	72	149
Type of Contracts				
1. Group contracts for IRS qualified (401) plans				
(a) private single employer	8,788,990	1,349,921,020	724,260,952	2,082,970,962
(b) multi-employer	2,314,120	346,980,368	23,881,850	373,176,338
(c) state or local government system	779,407	14,216,706	169,176,350	184,172,463
(d) H.R. 10 (Keogh)	2,936,995	21,189,968	0	24,126,963
(e) respondent company's plan	2,921,218	484,153,651	96,549,378	583,624,247
(f) other	0	3,595,520	1,899,023	5,494,543
2. Group contracts for plans <u>not</u> qualified under IRS (401)				
(a) private single employer	277,786	832,988	0	1,110,774
(b) multi-employer	0	0	0	0
(c) state or local government system	0	0	0	0
(d) respondent company's plan	0	0	0	0
(e) other	0	244,067	0	244,067
3. Group contracts for tax deferred 403(b) plans	41,380,941	0	5,882,793	47,263,734
4. Other plans or contracts				
(a) individual H.R. 10	12,502,926	341,426	0	12,844,352
(b) individual annuities	23,280,251	0	0	23,280,251
(c) individual contracts for tax deferred 403(b) plans	9,054,853	0	0	9,054,853
(d) individual contracts under IRS qualified (401(a) or 403(a) plans)	10,713,231	0	0	10,317,231
5. Other claims on the account's assets	3,069,687	2,575,687	0	5,645,374
TOTAL	118,020,405	2,224,051,401	1,021,650,346	3,363,722,152

Source: Responses to Study Questionnaire Form I-50.

(2) *Types of contracts funded.*—Table VI-66 shows the amount of separate account assets which represent interests of various types of contracts. A total of 149 accounts are represented in this table.²⁴² The \$3.36 billion in assets in these accounts make up 92 percent of the assets reported in Table VI-65. As our analysis of the group annuity business above (sec. D) led us to expect, separate accounts have been created primarily to fund IRS qualified group pension plans. Excepting one group 403(b) contract, all of the 72 single client accounts represented in Table VI-66 are accounts created for group pension or profit sharing plans qualified under Section 401 of the Internal Revenue Code. Although 55 of the 72 accounts underlie private single employer plans,²⁴³ there are significant amounts of assets represented by state or local government retirement systems, multi-employer plan contracts and the insurers' own employees' pension and profit sharing plans.²⁴⁴ Over 99 percent of assets in nonregistered commingled accounts represent interests of group contracts for 401 qualified plans. Most of the small remainder in this account category represents the insurers' claims on assets of the account.²⁴⁵

As of the end of 1969, separate accounts may have been registered under the Investment Company Act because they (i) were used to fund group contracts not meeting the requirements for exemption under Rules 3c-3 or 6e-1; (ii) were used to fund 403(b) contracts; (iii) were used to fund H.R. 10 contracts²⁴⁶ or (iv) were used to fund individual variable annuity contracts not eligible to benefit from any tax deferral provisions of the Internal Revenue Code. Judging from the status of accounts reporting in the Study sample as of December 31, 1969, registration of accounts used solely to fund Section 401 qualified group contracts has been a rare occurrence. Only one such account showed up in the Study sample.²⁴⁷ The 24 other registered accounts contained interests of 403(b) or H.R. 10 or other individual contracts. Five of these accounts consisted of 95 percent or more of group 403(b) contract interests, and two had assets over 95 percent of which were attributable to individual H.R. 10 contracts. Item 8 (other claims on the accounts' assets) for registered accounts represents seed money or other advances by the founding insurance companies to the accounts.

Not included in Table VI-66 is the CREF account. All of its \$1.3 billion of assets represent interests of individual contracts for 403(b) plans. CREF and its companion organization, TIAA, are limited to providing annuities for staff members of colleges, universities, inde-

²⁴² The attrition of 48 accounts from Table VI-65 is accounted for by the exercise of the relief provisions included in the Form I-50 instructions; i.e., these are accounts limited to start-up funds, or established solely for foreign customers or as liquidation accounts, or the smallest accounts of companies having more than 15 accounts.

²⁴³ These account for 71 percent of all single client account assets shown.

²⁴⁴ The assets shown under item 4(f), "other group 401 qualified plans," in Table VI-66 for single client accounts are attributable to a profit sharing trust for the insurance agents of a respondent company. There are four other accounts devoted exclusively to respondent companies' employee plans; two state or local government system accounts and nine multi-employer plan accounts are reflected in the single client accounts represented in Table VI-66.

²⁴⁵ Although some states require that separate account liabilities always equal assets, others permit insurers to accumulate a limited surplus interest.

²⁴⁶ Although insurers did receive "no action" letters with regard to accounts funding H.R. 10 contracts.

²⁴⁷ Such accounts would be eligible for example from registration under Rule 6e-1 since the allocation of employee contributions to the account and the funding of contracts for plans with less than 25 participants are both permitted under Rule 6e-1. The account in question later filed for 6e-1 exemption.

pendent schools and other nonprofit and tax-exempt educational and scientific institutions.

(3) *Age, size, and intended investment media.*—Among the account characteristics which may be of relevance in the analysis of investment policy and management practices applied to separate accounts are (1) the age of the account, (2) the size of the account, and (3) the intended investment media through which investment objectives are to be realized. These characteristics may be relevant, for example, in the analysis of (1) asset composition including the proportion of common equities held in each account, (2) management fees charged to the account, (3) trading activity, and (4) the degree of risk assumed in seeking investment return. This section briefly describes the age, size and investment objective characteristics of the account sample, and in the process, examines the relationship between the proportion of assets invested in common stock and these characteristics.

(a) *Age distribution of accounts.*—Although the initial state statutes authorizing the establishment of separate accounts were enacted in 1959, New York State did not grant such permission until 1962 and the applicability of federal securities laws to accounts serving as funding media for group annuity contracts was uncertain until the Commission's release in 1963 of Rule 3c-3 under the Investment Company Act and Rule 156 under the Securities Act. The Rule 3c-3 and Rule 156 exemptions clearly presented an opportunity to life companies to establish separate accounts in which a large portion of existing group pension-benefit plans could be funded free of any disabling features of the Investment Company and Securities Acts. However, no immediate rush of assets into newly created separate accounts occurred. Indeed, by the end of 1965, all separate accounts combined held only \$272 million in assets.²⁴⁸ But, as life companies geared up to the opportunities available, the growth in number of accounts and in assets accelerated.

This pattern of growth is reflected in Tables VI-67 to VI-69 which show, for each account type, the age distribution of separate accounts in existence as of end 1969. These tables display the number of accounts and their 1969 assets and common stock holdings classified by the year in which the accounts were established. About half of the reporting accounts were established during the last two reporting years and these recently created accounts held just over a quarter of all separate account assets.

²⁴⁸ Institute of Life Insurance.

Table VI-67
 Total Assets and Common Stock Holdings at Year End 1969
 For Separate Accounts Classified by Age of Account

Account Type: Registered

Year Account Established	Number of Accounts	Total Assets	Common Stock	Ratio: Common Stock to Assets
1969	11	\$ 6,086,102	\$ 4,620,948	.759
1968	8	13,943,917	11,377,520	.816
1967	5	44,932,223	32,661,350	.727
1966	3	36,447,555	31,781,455	.872
1965 or earlier	3	18,076,390	14,551,153	.802
Total: All Years	30	119,486,187	94,992,426	.795

Notes: "Year Account Established" is defined as the year assets were first placed in the account.
 "Total Assets" equals gross assets.

Source: Responses to Study Questionnaire Form I-50.

Table VI-68
 Total Assets and Common Stock Holdings at Year End 1969
 For Separate Accounts Classified by Age of Account

Account Type: Non-Registered Commingled

Year / Account Established	Number of Accounts	Total Assets	Common Stock	Ratio: Common Stock to Assets
1969	14	\$ 151,468,569	\$ 65,365,876	.432
1968	9	41,142,287	28,892,518	.702
1967	5	23,624,861	19,935,817	.844
1966	9	104,503,807	48,416,282	.463
1965	7	153,298,582	124,726,209	.814
1964	8	79,916,054	69,621,518	.871
1963	7	418,979,641	335,449,956	.801
1962	6	1,313,063,781	1,160,789,363	.884
1961	2	59,212,071	0	0
Total: All Years	69	2,345,209,653	1,853,197,549	.790

Notes: "Year Account Established" is defined as the year assets were first placed in the account.
 "Total Assets" equals gross assets.

Source: Responses to Study Questionnaire Form I-50.

Table VI-69
 Total Assets and Common Stock Holdings at Year End 1969
 For Separate Accounts Classified by Age of Account

Account Type: Single Client

Year Account Established	Number of Accounts	Total Assets	Common Stock	Ratio: Common Stock to Assets
1969	37	\$ 270,786,496	\$ 146,534,646	.541
1968	20	456,305,767	341,606,159	.749
1967	11	37,943,574	24,686,448	.651
1966	12	145,846,626	106,916,948	.733
1965	8	123,770,906	89,950,658	.727
1964	2	27,933,407	18,965,920	.679
1963	4	117,780,850	81,011,128	.688
1962	1	7,589,293	5,375,787	.708
Total: All Years	96	1,187,956,919	815,047,694	.686

Notes: "Year Account Established" is defined as the year assets were first placed in the account.
 "Total Assets" equals gross assets.

Source: Responses to Study Questionnaire Form I-50.

Table VI-70

Proportion of All Reporting Separate Accounts
and Separate Account Assets Represented by Accounts
Established During 1968-1969

Account Type	Number of Accounts (%)	Assets (%)
Registered	63	21
Non-Registered Commingled	33	8
Single Client	59	61
All Accounts	50	26

Source: Tables VI-67, VI-68 and VI-69.

Table VI-70 summarizes this pattern by account type. Particularly significant in the last two years was the creation of "separate" separate accounts for individual customers. About 60 percent of both the number and existing assets of single client accounts are accounted for by accounts established during 1968-1969.

There is some suggestion from Tables VI-68 and VI-69 that accounts less than twelve months old tend to have a significantly lower proportion of assets in common stock than older accounts. This may reflect the mechanical and decision-making problems involved in investing quickly substantial amounts of new funds.²⁴⁹ If true, this means there should be relatively low common stock turnover rates for new accounts.²⁵⁰ On the other hand, market conditions in 1969 may have been responsible for managers holding back on common stock commitments.²⁵¹

(b) *Size distribution of accounts.*—The size distribution of the reported separate accounts is summarized in Tables VI-71 and VI-73. All registered accounts are relatively small; 26 of the 30 accounts with any assets contained assets of less than \$10 million at the end of 1969. Three of the four remaining accounts had less than \$25 million in assets.²⁵² This reflects the fact that the registered accounts are relatively new (see Table VI-70), and primarily serve to fund contracts sold directly to individuals. As concluded above (sec. C.2) many of the individual variable annuity products are relatively new and there are reasons for believing the total potential demand in these areas is limited. By way of contrast, separate accounts used to fund existing pension-benefit plans can grow rapidly through the transfer of assets from the general account to separate accounts or from other funding agents to insurer's separate accounts.

In the nonregistered commingled account category there were 65 accounts with some assets as of the end of 1969. Of these 65 accounts, 35 (54 percent) had assets of less than \$10 million and 49 (75 percent) had assets of less than \$25 million. However, these 49 accounts contained less than 15 percent of all assets in this category. At the other end of the size spectrum, five accounts, each with over \$100 million in assets, accounted for about two-thirds of all nonregistered commingled account assets. Of these five large accounts, four were established in 1962 and the fifth in 1963.

²⁴⁹ This difference does not show up in registered accounts. The amount of money involved in these accounts is considerably less than in the nonregistered accounts.

²⁵⁰ This hypothesis is investigated below. See sec. F.5.a.

²⁵¹ This argument presumes some degree of asymmetry in treatment of new liquid accounts from established accounts heavily invested in common stock.

²⁵² In fact, each of these accounts had less than \$15 million in assets.

Table VI-71

Number, Assets and Common Stock Holdings
of Separate Accounts Classified by
Size of Account
Registered Accounts.

Asset Size Category	Number of Accounts	Total Assets	Common Stock	Other Assets	Ratio: Common Stock to Total Assets
\$0	1	0	0	0	----
\$1-10 million	26	\$ 50,404,000	\$39,472,116	\$21,863,768	.767
\$10-25 million	3	\$ 38,795,322	\$29,702,359	\$ 9,092,963	.766
Over \$25 million	1	\$ 30,286,865	\$25,817,951	\$ 4,468,914	.852
All Accounts	31	\$119,486,187	\$94,992,426	\$35,425,645	.769

Note: Ratios are unweighted.

Source: Responses to Study Questionnaire Form I-50.

Table VI-72

Number, Assets and Common Stock Holdings
of Separate Accounts Classified by
Size of Account
Non-Registered Commingled Accounts

Asset Size Category	Number of Accounts	Total Assets	Common Stock	Other Assets	Ratio: Common Stock to Total Assets
\$0	5	0	0	0	----
\$1-10 million	35	\$ 114,913,783	\$ 77,181,405	\$ 37,732,378	.608
\$10-25 million	14	\$ 228,451,518	\$ 138,327,142	\$ 90,124,376	.597
\$25-50 million	9	\$ 297,744,199	\$ 172,254,628	\$125,489,571	.577
\$50-100 million	2	\$ 150,395,853	\$ 94,819,708	\$ 55,576,145	.676
\$100-300 million	4	\$ 759,901,960	\$ 621,250,266	\$138,651,694	.820
Over \$300 mil.	1	\$ 793,802,340	\$ 749,364,400	\$ 44,437,940	.944
All Accounts	70	\$2,345,209,653	\$1,853,197,549	\$492,012,104	.622

Note: Ratios are unweighted

Source: Responses to Study Questionnaire Form I-50.

Table VI-73

Number, Assets and Common Stock Holdings
of Separate Accounts Classified by
Size of Account
Single Client Accounts

Asset Size Category	Number of Accounts	Total Assets	Common Stock	Other Assets	Ratio: Common Stock to Total Assets
\$0	1	0	0	0	----
\$1-10 mil.	69	\$ 228,532,165	\$144,729,723	\$ 83,802,442	.575
\$10-25 mil.	15	\$ 242,891,754	\$159,369,712	\$ 83,522,042	.654
\$25-50 mil.	3	\$ 102,128,808	\$ 68,537,990	\$ 33,590,818	.678
\$50-100 mil.	7	\$ 451,400,380	\$297,357,106	\$154,043,274	.668
\$100-300 mil.	1	\$ 163,003,812	\$145,053,163	\$ 17,950,649	.890
All Accounts	96	\$1,187,956,919	\$815,047,694	\$372,909,225	.601

Note: Ratios are unweighted

Source: Responses to Study Questionnaire Form I-50.

Most single client accounts are relatively small; of .95 with some assets, 69 (73 percent) contain less than \$10 million in assets and another 15 each have less than \$25 million. Thus, accounts of less than \$25 million make up 78 percent of single client accounts; they contain 40 percent of assets in this account category. As observed above, (see Table VI-70), there is less indication of a relationship between account size and age in these accounts than in commingled accounts. In part, this is because some single client accounts are created by employers' shifting assets to insurers from other funding agents.

There is some indication that larger accounts tend to have a higher proportion of their assets in common stocks. However, account size and age appear to be correlated, at least in the commingled account category, and as seen in the next section, most of those accounts which are designed to invest in debt securities and mortgages are relatively small. It also appears that the registered accounts have a higher proportion of assets in common stocks than do nonregistered accounts in the same size range.

(c) *Intended investment media.*—Respondents were asked to indicate for each of their separate accounts, whether the account was intended primarily for investment in (1) common stocks, (2) debt securities, (3) real estate mortgage loans, or (4) some other type of asset or some mix of assets. The distribution of responses to this question is summarized in Tables VI-74 to VI-76.

Most of the reported accounts were primarily established for equity funding. Among registered accounts, this was accomplished in 7 of the 31 cases by investing in the shares of an investment company managed by the insurer which in turn invested primarily in equities. However, 25 of the 166 nonregistered accounts were designed to invest primarily in debt securities (8), mortgage loans (2), or a mix of debt instruments and equity securities (15).²⁵³ Eight of the ten accounts intended primarily for debt investment were commingled accounts, but 12 of the 15 debt-equity mix accounts were established for individual customers. None of the ten debt accounts held any common stock. When aggregated the debt-equity mix accounts appear to be rather evenly balanced between debt and equity instruments. Individually the common stock to asset ratios for 11 of the 15 debt-equity accounts falls within the range from .32 to .68. Of the 25 debt and debt-equity accounts, 7 are from Canadian companies.

The age and size characteristics of the debt and debt-equity separate accounts are summarized in Table VI-77 in the same format as age and size distributions for all accounts were summarized above. These accounts seem to be typically somewhat smaller than equity oriented accounts, even though a higher proportion of debt and debt-equity accounts were established prior to 1967 than is true for equity accounts. Of the five largest debt-equity accounts, four were relatively old by separate account standards, two having been established in 1961 and two in 1966. However, the fifth account resulted from a transfer of an account from a bank trustee to an insurer in 1969.

²⁵³ In addition, 14 accounts were liquidation accounts or held short-term investments on a temporary basis. Often when insurers receive assets in kind (e.g., securities) they will be placed in a temporary or liquidation account until the assets are liquidated and the proceeds placed in a regular account.

When common stock accounts are segregated from debt and debt-equity accounts, it still appears that there is a tendency for larger accounts to have a higher proportion of their assets in common stock. Thus, as shown in Table VI-78, dollar weighted common stock to asset ratios are higher for all categories than are unweighted ratios. Debt accounts held no common stocks. For debt-equity mix accounts, no relation between account size and the common stock to assets ratio is apparent.

(d) *Separate account characteristics and the proportion of account assets held in common stock.*—In the process of describing characteristics of separate accounts, it appeared that there exists some relationship between the proportion of an account's assets held in common stocks and the account's (1) age, (2) size and (3) registration status under the Investment Company Act. The last characteristic reasonably effectively distinguishes between accounts that primarily contain interests from annuity contracts sold to individuals and accounts that primarily serve group contracts with pension-benefit plans. In particular, it has appeared that older accounts, larger accounts and registered accounts tend to have a greater portion of their assets invested in common stocks.

Because of possible interrelationships among and between these characteristics and other factors which may affect separate accounts' common stock/asset ratios, any of these apparent relationships may be spurious. In order to ascertain the existence of any such relationships it is necessary to conduct statistical analysis that allows separation of the independent impact of each characteristic on common stock holdings. One means of accomplishing this is through multiple regression analysis. In this way it is possible to investigate the presence or absence of a statistically significant relationship between an account's age and its common stock-to-assets-ratio after controlling for the account's size and other characteristics.

Table VI-79 reports the results of such a multiple regression analysis. The particular form of the equation estimated assumes that the relationship between the proportion of an account's assets in common stock and the size of the account is logarithmic; that is, a giving percentage change in account size will produce the same percentage change in the common stock-to-asset-ratio. The "t values" reported provide a means of measuring the statistical significance of each regression coefficient; ²⁵⁴ conventionally a 't' greater than +2.0 or less than -2.0 is considered to confirm the hypothesis that the observed relationship is statistically significant. The coefficient of determination (R^2) measures the fraction of the variance in the common stock-to-assets-ratio that is jointly explained by the independent variables. ²⁵⁵

Our present interest is simply in confirming or refuting the presumed existence of a relationship between the fraction of an account's

²⁵⁴ The 't' values are ratios of the value of a regression coefficient to its own standard error.

²⁵⁵ In this chapter, all of these coefficients are reported after adjustment for degrees of freedom; this is the meaning of R^2 .

assets held in common stock and the account's (1) size, (2) age, and (3) account category. The results displayed in Table VI-79 indicate that (1) larger accounts do hold a greater percentage of their assets in common stock, (2) older accounts do have higher common stock-to-asset-ratios and (3) registered accounts do hold a greater proportion of their assets in common stock than do unregistered accounts. Each of these results is statistically significant. In addition, the results suggest that commingled accounts tend to have greater holdings of common stock relative to assets than single client accounts (after controlling for registration and other characteristics).²⁵⁶

Finally, the size of the insurer, measured by an insurance company's general account assets, was controlled for by including this measure as an independent variable. The relationship between the common stock-to-asset-ratio of an insurer's separate account and the insurer's overall size is positive but not statistically significant.

²⁵⁶ The commingled variable took on a value of 1 if an account was commingled and 0 if the account was established for a single client; similarly the registered variable took a value of 1 if an account was registered and 0 if it was not. The relation between "commingled" status and the common stock-to-asset ratio is almost significant by the conventional 't' test.

Table VI-74

Separate Accounts Classified by Primary Intended Investment Media
and by Actual Investments:
Registered Accounts

Primary Investment Media	Common Stocks	Investment Company Shares	Totals
Number of Accounts	24	7	31
Total Common Stock	\$ 89,728,155	\$5,264,271	\$ 94,992,426
Other Assets	\$ 24,477,138	\$ 16,623	\$ 24,493,761
Total Assets	\$114,205,293	\$5,280,894	\$119,486,187

Note: Total common stock investments include investment company shares.

Source: Responses to Study Questionnaire Form I-50

Table VI-75

Separate Accounts Classified by Primary Intended Investment Media
and by Actual Investments:
Non-Registered Commingled Accounts

Primary Investment Media	Common Stocks	Debt Securities	Real Estate Mortgages	Mixed Debt and Equity	Liquidation or Temporary Investments	Total
Number of Accounts	58	6	2	3	1	70
Common Stock	\$1,820,877,453	0	0	\$32,320,096	0	\$1,853,197,549
Other Assets	\$ 332,109,490	\$63,740,982	\$49,561,692	\$32,168,196	\$14,431,744	\$ 492,012,104
Total Assets	\$2,152,986,943	\$63,740,982	\$49,561,692	\$64,488,292	\$14,431,744	\$2,345,209,653

662

Source: Responses to Study Questionnaire Form I-50.

Table VI-76 .

Separate Accounts Classified by Primary Intended Investment Media
and by Actual Investment:
Single Client Accounts

Primary Investment Media	Common Stock	Debt Securities	Mix of Debt and Equity	Liquidation or Temporary Investments	Totals
Number of Accounts	69	2	12	13	96
Total Common Stock	\$739,273,441	0	\$ 71,463,245	\$ 4,331,008	\$ 815,047,694
Other Assets	\$243,503,208	\$18,530,326	\$ 90,118,805	\$20,756,886	\$ 372,909,225
Total Assets	\$982,776,649	\$18,530,326	\$161,582,050	\$25,067,894	\$1,187,956,919

Source: Responses to Study Questionnaire Form I-50.

Table VI-77

Age and Size Distributions
of the Debt and Debt-Equity Mix
Separate Accounts

Year Established	Number of Accounts	Total Assets (\$millions)	Asset Size Category (\$millions)	Number of Accounts	Total Assets (\$millions)
1969	9	115.9	0-10	14	50.3
1968	2	19.3			
1967	2	27.0	10-25	6	100.5
1966	6	103.2			
1965	0	0	25-50	4	140.6
1964	1	1.8			
1963	2	18.6	50-100	1	74.6
1962	0	0			
1961	3	80.2			
Totals	25	366.0	Totals	25	366.0

Table VI-78

Ratios of Common Stock Holdings to Total Assets
for Separate Accounts Classified by Type
and Primary Intended Investment Media

Type of Account	Common Stock Accounts		Debt-Equity Mix Accounts	
	Dollar Weighted	Unweighted	Dollar Weighted	Unweighted
Registered	.786	.700	none	none
Non-Registered Commingled	.846	.735	.501	.488
Single Client	.752	.717	.442	.455

Note: Common stock accounts exclude accounts investing primarily in investment company shares.

TABLE VI-79

Multiple Regression Statistics from the Analysis of the
Proportion of Separate Account Assets
Invested in Common Stock

Dependent Variable: Log (Common Stock-to-Assets-Ratio)

Independent Variables	Regression Coefficients	't' value
Log Account Size	.051	4.29
Log Insurer Size	.022	1.32
Log Year Account Established	-2.627	-3.16
Registered	.129	2.20
Commingled	.070	1.92

Constant 9.45

\bar{R}^2 .12

(4) *Insurers' investment decision-making responsibility in separate accounts.*—Although life insurance companies compete in the investment management business with bank trust departments, investment counseling firms and others, historically the relationship between insurers and their contractholders has been fundamentally different from that prevailing between noninsurance managers and those for whom they act as trustee or managing agent. The noninsurance managers which are under scrutiny in this study operate explicitly as managers of other peoples' money; and banks and investment advisory firms provide investment management services under a wide range of arrangements with regard to where decision making authority resides. Frequently customers will retain some role in the selection of investments for the portfolio and influence or determine the timing of transactions and the designation of the brokers chosen to execute trades.

By way of contrast insurers are governed by a set of state statutory and regulatory standards which explicitly view assets generated through the sale of insurance and annuity products as assets of the insurer, not of the contractholders, although the latter may have limited contractual rights to redeem or borrow some portion of the accumulated cash value through the exercise of surrender or policy loan options, and, as discussed above (sec. D.8.d.(3)), some portion of group annuity contractholders' interests has been transferable to other funding agents under some contracts. In keeping with the view that all assets generated from the insurance and annuity business are assets of the insurer, insurers have retained sole authority to make all investment decisions, subject only to statutory constraints, and to select brokers, investment bankers, mortgage bankers and other intermediaries with whom they deal in effecting investment decisions.

In part this difference between insurers and noninsurer managers arises from the traditional view that (in spite of the large sums of assets accumulated by life insurers) the investment features of insurance contracts and the investment activities of insurers are almost incidental to the insurance business.²⁵⁷ However, as has been described above, with the introduction of the variable annuity, and in the funding of group annuity contracts generally, insurers have in recent years been issuing contracts in which the investment features are much more significant than before and contracts under which assets can be much more freely transferred to other funding agents than used to be the case. The investment and transferability features are often especially predominant in contracts which include the utilization of separate accounts as funding media. In this manner insurers are moving directly into the investment management business, and it therefore becomes relevant to ask whether insurers are experiencing any dilution in their traditional exercise of full investment authority.

Form I-50 inquired into this situation. Of the 147 accounts responding, 130 indicated the insurer possessed "sole investment authority to acquire and dispose of specific assets without consulting with parties who have a participatory interest in their account." However, in four of these 130 accounts, the managing insurer indicated that

²⁵⁷ In this view the cash values accumulated in insurance contracts which are the primary generators of assets under insurance company management are regarded as an unintended byproduct of a successful marketing device, that is, the level premium.

“interested parties sometimes recommend specific acquisitions or dispositions and the portfolio manager frequently acts upon such recommendations.” Thus a total of 21 accounts with \$42 million of assets gave some indication that contractholders retained some degree of investment authority or influence.²⁵⁸

Four of these 21 accounts were registered as investment companies under the Investment Company Act.²⁵⁹ In three of these registered accounts, the absence of sole authority meant that the insurer was limited to investing assets of the account solely in shares of an affiliated mutual fund, and this restriction could be modified only pursuant to a vote of the holders of certificates and contracts having an interest in the separate account.²⁶⁰ In managing the fourth account, the insurer (a Canadian company) operates within an investment program which has been approved, and can only be modified, by an investment committee elected by the participants in the account.

Three nonregistered commingled accounts were represented among the twenty-one.²⁶¹ Two of these accounts contained interests which were limited to retirement plans established for employees of affiliated companies. In these accounts consultation with designated parties-in-interest was required prior to execution of trades.

The remaining fourteen accounts were established for single clients. These accounts held \$374 million in assets or 37 percent of respondent single client account assets. The range of division of investment authority is summarized by the following seven cases, each of which reflects the situation existing in one or more of the fourteen accounts:

(1) All assets are invested solely in accordance with written directions from the contractholder or an advisory committee designated by the contractholder.

(2) The insurer has followed the directions of the contractholder’s investment adviser.

(3) The insurer follows directions of the contractholder’s investment adviser to the extent they comply with applicable investment statutes. The insurer may refuse such directions or reverse directed orders which have already been executed. However, in such event the contractholder may terminate the contract without incurring a surrender charge.

(4) The insurer is ultimately solely responsible for investment decisions, but agrees to consider recommendations made on behalf of the firm designated by the contractholder. Recommendations are made by the advisory firm with regard to the timing of investments, portfolio composition and specific buy and sell decisions. Specific procedures are established to govern communications between the advisory firm and the insurer on all recommendations made by the advisory firm in order to insure that the advisory firm is fully informed with respect to actions taken by the insurer.

²⁵⁸ The remaining 126 accounts held \$2.891 billion of assets.

²⁵⁹ These accounts had \$6.1 million in assets or seven percent of assets in responding registered accounts.

²⁶⁰ Two other registered accounts with only \$597,000 in assets reported that the insurer had sole authority but the assets of these accounts appear to be intended to be invested only in affiliated mutual fund shares.

²⁶¹ These held \$61.4 million in assets or three percent of the assets in this account category.

(5) The contractholder *may* direct the insurer in writing to acquire any investment for the account or to sell any investment held in the account.

(6) Investments are limited by an approved list which is worked out with the client. Additions to the list are cleared, in advance, with the client.

(7) An approved list of equities and other types of investments is maintained. The contractholder shall receive written notices of any additions to the list proposed by the insurer, and may disapprove of any of them. The contractholder has the right to recommend additions to the list and the insurer is required to give notice as to whether it will make the addition. Should the insurer refuse to make a recommended addition, it shall, on notice from the contractholder, make payment in a specified amount to a specified person to purchase and hold the recommended investment. The contractholder has the right at any time to direct the insurer to delete any investment from the approved list.

All acquisitions are limited to the approved list. Acquisition and disposition decisions are made by the insurer except that, (1) the insurer shall comply with instructions received from the contractholder to limit further purchases of any specific investments, and (2) the insurer shall dispose of any portion or all of any specific investments upon receipt of instruction from the contractholder, the timing and manner of the disposition to be determined by the insurer in a manner consistent with the instruction received and with the investment objectives of the account.

The responding insurers were also asked whether contractholders are permitted to designate brokers to be utilized in executing transactions for the accounts. In twenty-three accounts some brokerage commissions are allocated in accordance with directions from participating customers. In all these accounts the designation was carried out by paying brokerage commissions to named broker-dealers and allowing them to retain the full amount paid.

Five of these 23 accounts were commingled accounts with \$365 million in assets. None of these accounts were registered. In four of the five commingled accounts less than 15 percent of the brokerage commissions on portfolio transactions for the account are designated. The fifth account reported a somewhat higher proportion designated but a single contractholder held a dominant interest in that account.

The eighteen single client accounts in which designation occurred had \$194 million in assets. In twelve of these accounts the amount designated was less than 15 percent of brokerage commissions generated by the account. In five of the accounts, over 85 percent of the brokerage was designated, and the proportion designated in the remaining account fell between 15 and 85 percent.

Responding insurers were asked whether the exercise of investment authority or brokerage designation by the customer has ever "impaired your company's performance record as manager of this account during any period since its inception"? No insurer indicated that this had ever been the case for any separate account under its management. Where consultation arrangements exist, or a contractholder's (or his advis-

er's) recommendations are acted upon, many insurers limit such concessions by a policy statement similar to the following:

"Suggestions from Trustees, if accepted by [the Insurer] are subject to sale without approval of the trustee as are all securities now held or to be held in the account. Because [the Insurer] is responsible for the investment performance of the Separate Account, [the Insurer] will decline any suggestion which in [the Insurer's] opinion would hurt performance."

Such a policy would presumably be regarded by most insurers as necessary to fulfill the life company's responsibility under state insurance statutes.

Where sharing of investment authority and designation of brokerage do occur they do not generally occur in the same accounts. Of 21 accounts in which contractholders played a role in investment decisions and 23 in which clients designated some brokerage, only four accounts are common to both groups. In terms of the totality of separate accounts the dilution of insurance company investment sovereignty is found in only a minority of cases. However, these cases are symptomatic of a fundamental change in the insurance business, as a result of which insurance companies are competing much more openly and vigorously as investment managers. The next section examines the basis and magnitude of charges made by insurers for these investment management services.

c. Investment management fees charged to separate accounts

(1) Investment services provided

Insurers offer a variety of services to all contractholders including those who choose to make use of separate account funding. Most of the assets in separate accounts represent interests of employers funding pension-benefit plans. The services provided these contractholders are described in general terms in sec. D.4.d. above. The focus here is on investment management services provided to separate accounts, the method of assessing investment management fees and the magnitude of these fees.

Management of an investment account involves periodic asset valuations, maintaining records of asset holdings and transactions, producing and distributing reports to contractholders, consulting with participating contractholders or their investment advisers, performing security and loan analysis, and making investment decisions and determining how best to implement these decisions. Where a separate account is utilized, charges for many of these services may be made directly to the account, or may be made to the contract's deposit fund or general account interest or may be made to a trustee or other party affiliated with the funding employer or employee group and paid from sources outside assets held by the insurer. The direct costs of executing transactions for the account (for example, brokerage commissions and transfer taxes) are normally charged directly to the account. Generally, investment management fees are also assessed directly from the account's assets. This was the case for over 90 percent of investment management fees charged by insurers to commingled separate accounts reporting to the Study and for over 80 percent of responding single client accounts.²⁶²

²⁶² Estimated from data reported for separate accounts in questionnaire Form I-25 for the period 1965-1969.

Insurance companies value separate account assets to market with greater frequency than most other types of managers of pension fund assets. Registered separate accounts are, of course, valued daily unless there are no additions to or withdrawals from the account.²⁶³ Of the remaining 124 reporting accounts, all but five are valued at least monthly.²⁶⁴ Of the remaining five accounts, two are valued quarterly (one of these is informally valued to market at least monthly), and a third is valued three times a year. The other two accounts are balanced between debt and equity security holdings; the equities are valued to market weekly but the market valuation of the debt securities is performed only annually.²⁶⁵

Most insurers distribute reports to group annuity contractholder participants in separate accounts at least annually, and sometimes quarterly. With respect to separate account activity these reports commonly provide a list of the individual asset holdings in the account, a record of individual asset acquisitions and dispositions since the last report, a record of the change in the value of the individual contractholder's interest in the account, and usually some measure of the investment performance of the account or the information needed to make sophisticated calculations of investment performance.

(2) *Methods of assessing investment management charges*

Respondent companies were asked to report information on charges against separate accounts for investment management services in two ways. First they were asked to supply the "current annual fee schedule for management of assets" for each account.²⁶⁶ If fees are based on separately priced services, a schedule for each service was to be provided. Also respondents were asked to indicate whether or not management fees were negotiable.

Second, all insurers were asked to supply for each reporting account, data for each of the five years 1965-1969, "showing all charges, fees or expenses (a) charged to the account, or (b) charged directly to some other person or organization or account and paid from funds other than this account's assets."²⁶⁷ Respondents were asked to separate those charges specifically attributable to the provision of investment management services from other expenses assessed against the account. Most companies were able to provide (1) a separate rate or schedule representing investment management charges, and (2) annual investment management fees assessed. However, a few companies used annual fee schedules which combined fees for investment management and other services and were unable to break out investment management charges separately.

In nearly all cases investment management fees charged separate accounts are based upon the net asset value of the account or upon each contractholder's interest in the account's net asset value. In some cases there is a stated minimum fee, or minimum fees for each step in a graduated schedule. In some instances, assessments are made against each contribution to the account and each withdrawal from the ac-

²⁶³ See Rule 22c-1 under the Investment Company Act of 1940.

²⁶⁴ Fourteen nonregistered commingled accounts are valued daily, three weekly and thirty-three monthly; seventeen single client accounts are valued daily, thirteen weekly and thirty-nine monthly.

²⁶⁵ These are commingled accounts but the only contractholders represented in these accounts are companies affiliated with the insurer.

²⁶⁶ See Form I-50, Question 19.

²⁶⁷ See Form I-25.

count. Specific charges are sometimes made for asset valuations in excess of the scheduled number or for reports of the account's condition or activity in excess of the scheduled reports to all participants. In one case, the basic fee was based on income earned from the portfolio rather than the asset value. However, the basic charge for investment management services for nearly all accounts is calculated by applying a stipulated percentage to the net asset value.

In commingled accounts the fee rate is most commonly stated as a flat percentage of the account's assets. This was the case for all of the reporting registered accounts and for about two-thirds of the unregistered commingled accounts. In the remaining unregistered commingled accounts, the fee rate was expressed as a schedule. These schedules are typically structured in the following fashion:²⁶⁸

<i>Average value of policyholder interest during the policy year</i>	<i>Investment expense charge on portion of average value (percent)</i>
First \$100,000 -----	0.40
Next \$200,000 -----	0.30
Next \$700,000 -----	0.20
Next \$2,000,000 -----	0.10
Next \$7,000,000 -----	0.07
Next \$10,000,000 -----	.0625

When a schedule is used, the charge is usually being levied against each participating contractholder separately, although a few instances were reported where the schedule is based upon the account size and a single fee is assessed against the account itself.

Most fee rates are reviewed frequently, usually on an annual basis but sometimes as frequently as monthly. Investment management fees are most frequently assessed monthly. Some companies determine this fee as a part of the annuity contract's experience rating process and the fee rate automatically changes annually. Other companies appear to make less frequent changes in the rate or schedule used.

There does not seem to be any greater tendency to use a fee schedule for the larger commingled accounts, than for smaller ones. The common use of a flat fee ratio means that all contractholders are assessed the same percentage fee regardless of the size of their respective interests. This result also occurs whenever a schedule is used but the charge is assessed against the account itself rather than each contractholder.

The graduated schedules used reflect economies of scale realized in managing larger amounts of funds. These economies can be reflected in flat fee rate charges by periodic changes in the fee ratio as the account (or the separate contractholder's interest) grows.

Most companies indicated that fee rates were not negotiable. However, some medium-sized and smaller companies indicated that the fee rate for larger cases was negotiable. For a smaller company this meant a willingness to negotiate with a client having a separate account interest of as little as \$1 million. The schedule illustrated above is one in which fees are negotiable for that portion of a contractholder's interest exceeding \$20 million. In a few instances more than one fee rate or schedule was reported. In these cases the fee rate varied with the type of contract or according to whether the client had an interest in more than one investment account. For example,

²⁶⁸ The schedule shown is one actually utilized by a reporting commingled account.

the schedule reported above is an actual schedule applied to interests of those contractholders having IPG contracts. Regular deposit administration contractholders represented in the same account were charged a flat 20 percent of their share of the account's net asset value. Another account reported a lower flat fee rate for group H.R. 10 contracts than that charged to other group contracts participating in the account. However, as of the end of 1969, only one percent of the account's assets were attributable to H.R. 10 contracts. In the few instances where the fee rate was affected by the dispersal of funds among separate accounts or between the general account and a separate account, the contractholder paid a somewhat lower investment management fee if his interest was limited to a single separate account.

One account reported charging a performance fee. This consisted of a basic (flat rate) fee plus (minus) one-twentieth of the excess (deficiency) between the total rate of return achieved by the separate account and the comparable rate of return attained by the Standard and Poor's 500 Index for the four preceding calendar years. Each year the fee will be recalculated on the basis of the most recent four years' performance. This account is considered by the insurer to be a commingled account since it was created in 1968 with that intention. However, as of end 1969, the account had only one participant, namely, the insurer's own employees' retirement plan.

(3) *Magnitude of investment management fees charged*

As observed above, two sources of information on the magnitude of investment management fees charged participants in separate accounts were available from the study questionnaires; namely, stated flat fee rates or fee schedules in effect at the time the questionnaires were being completed and actual fees charged for investment management services for each year 1965 to 1969. In order to express the latter fees in the most commonly used fees-to-assets ratio form, it is necessary to divide reported fees by the appropriate net asset value. Since management fees appeared to be most frequently calculated and assessed monthly, it would have been best for this purpose to have monthly asset values for the five-year period. However, the Study collected asset data on separate accounts for only two points in time.²⁶⁹ The closest approximation to assets collected on a more frequent basis was each account's annual holdings of corporate debt and equity securities.²⁷⁰ This figure is therefore used as a measure of account size throughout the following reports.

Accounts available for the analysis of fee ratios during each year of the 1965-1969 period were limited to those accounts which:

- (1) existed throughout any year in which fees were measured and reported total corporate security holdings as of the end of the previous year as well as of the end of the current year;
- (2) reported fees for investment management services separately from other charges, and
- (3) at the end of 1969 had at least 80 percent of net asset value invested in long term corporate securities.

²⁶⁹ On Form I-21 (and Form I-50) the market values of net and gross assets were reported for December 31, 1969. Also a Form I-21 was submitted as of the end of 1964 or the end of the first full year of the account's existence.

²⁷⁰ Excluding short-term instruments defined as issues payable upon demand or having at issue a maturity of one year or less. This information was collected on Form I-26, Tables I, II, and III.

Consequently, limitation (1) excluded accounts from the analysis during the year in which they were established, and all fee information for 1965 was excluded.²⁷¹ Limitation (2) excludes accounts for which the insurer claimed to be unable to separate investment management service charges from other charges and accounts in which the insurer's own employees' retirement plan was a participant and no explicit charge was made to this plan. Finally, limitation (3) assures that only accounts are included for which the value of long-term corporate security holdings is a reasonable approximation to net asset value. Accounts with a large position in cash and short-term obligations by design or accident as of the end of 1969, and accounts designed to invest in something other than corporate securities (for example, mortgage loans) are therefore excluded.²⁷²

Expenses attributable to investment management can be influenced by a number of variables. The most important of these influences should presumably be the size of the account managed. Substantial economies of scale should be realized from management of larger accounts, and these may be passed along to customers through the application of graduated fee rate schedules²⁷³ or through periodic revision of flat fee rates or fee rate schedules. In commingled accounts the effect of account size on management expenses may depend upon the number of participating contractholders.

It is also probable that management economies are related to the size of total assets under management by the insurer, since many overhead expenses may relate to services utilized by a number of accounts. It is relevant to inquire whether these savings are passed on to customers.

Expenses and fee rates may vary depending upon whether the account in question is a pooled account or created for a single customer. Since it is likely to be expensive to establish a separate account for a client compared to the cost of managing the client's investment interest in an existing commingled account, it is to be expected that at least smaller single-client accounts are likely to incur higher management fees than commingled accounts of comparable size. This effect may be dissipated with larger single-client accounts that are more economical to manage. Once established such an account has less in the way of administrative expenses than a pooled account of comparable size. Also, large customers who are able to negotiate an individual separate ac-

²⁷¹ Since the first reporting date for Form I-26 corporate securities holdings information was as of the end of 1965.

²⁷² There is a question with regard to whether use of long-term corporate security holdings as a proxy for assets, even with an 80 percent cutoff, introduces an upward bias in fee rates. For many accounts this is not so because corporate securities normally account for 95 percent or more of assets; but for some accounts there is an upward bias. On the other hand in discussing the fee evidence with respondents, the Study found that young accounts often have an accelerated growth pattern over the year which results in the average of beginning and end-year assets systematically exceeding the average of twelve end-month asset valuations. Thus, the Study's method seems to produce measurement errors which lead to an understatement of fee rates in many accounts. These two factors have opposing effects on fee rates but with the available data and supplementary information, it is not possible to state a firm conclusion with respect to the net effect of these factors.

²⁷³ If fee rate schedules are applied to the account, then growth in the account automatically leads to lower fee ratios. If the schedules are applied to contractholder interests, then the extent to which economies from increases in account size are automatically passed on depends on whether account growth results more from growth of existing participants' interests or from an addition of new participants. To the extent the latter is the case, revisions in the schedule are required to pass on cost savings. Similarly, realized economies can be passed on in situations where flat fee ratios are changed only through reduction in the applicable ratio.

count may also possess sufficient bargaining power to negotiate a lower fee schedule than is applied to a commingled account. Thus, large single-client accounts should be expected to incur lower management fees than large commingled accounts.

It is possible that registration under the Investment Company Act affects fee rates. However, the expected direction of the effect is not so obvious. Registered accounts may be more expensive to administer because they tend to contain many more participating interests than nonregistered commingled accounts. This would tend to produce higher management fees for registered accounts. On the other hand, mutual fund industry practice and the Commission's efforts to have legislation enacted to require that investment company fees be reasonable,²⁷⁴ may have inhibited registered accounts from charging a management fee of more than one-half of one percent, whereas nonregistered accounts may not be so inhibited.

The year in which the fee ratio is measured may be a relevant determinant of the magnitude of the fee rate. Adjusting for account size, insurer size and account characteristics, the general rising cost of services during the 1966-1969 period may be reflected in higher fees in later years.

Finally there are several variables which may be related to the amount of effort and cost involved in managing an account. Among these are the number of issues held in the account, the account's turnover and activity rates,²⁷⁵ the composition of assets held in the account, and the extent to which customers retain some authority with respect to investment selection, trading decisions or designation of brokers. None of the stated bases for establishment of fee rates admit of these influences; nonetheless, it is possible that some measures of time and effort enter into the establishment of differential fee rates or schedules for the various accounts under management.

All registered accounts reported charging fixed fee rates based upon net asset value. Thirteen of the fourteen responding accounts reported fee rates between .25 percent and .50 percent.²⁷⁶ The mean value for these fourteen accounts was .36 percent. All of these accounts held under \$20 million in assets as of December 31, 1969 and all but one held under \$10 million.²⁷⁷ Within this rather narrow size range there is no evidence of any correlation between fee rates and account size.

The stated fee bases for nonregistered commingled and single client accounts are summarized in Table VI-80. Because fee schedules are formatted in a number of different ways and where the format is the same the size steps vary from account to account, these heterogeneous schedules are summarized by computing, for each schedule, the cost to a contractholder at several benchmarks representing various sizes of a contractholder's interest. Accounts charging flat fee rates are

²⁷⁴ These efforts have resulted in enactment of the Investment Company Amendments Act of 1970, § 20, Pub. L. No. 91-547 (Dec. 14, 1970).

²⁷⁵ These measure an account's trading activity in common equity securities. Turnover and activity rates for separate accounts are analyzed in sec. F. 5.a. below.

²⁷⁶ The fourteenth account reported a rate of .125 percent.

²⁷⁷ As indicated above, account size is measured as total corporate security holdings excluding short-term issues.

shown separately. The decline in the number of accounts as the size of the interest increases occurs because of schedule cutoffs; for example, one commingled account schedule does not state any fee rate for amounts of \$5 million or more. In some cases this results because the amount is beyond the experience of the account; in other cases it is because fee rates are negotiated for interests above some specified amount.

The stated charges summarized in Table VI-80 do suggest that economies realized from managing larger sums are reflected in lower fee rates as the size of a contractholder's interest increases. As expected, small single client accounts are charged higher management fees than small commingled accounts. For accounts of \$25 million or more there is, however, no significant difference in fee rates by account type. Thus, the fee rate falls more rapidly with size of interest for single client accounts than for commingled accounts.²⁷⁸ The sharpest decline occurs between interests of \$1 million and \$10 million in both types of accounts.

If fee rates are analyzed on an account basis, the similarity between fees charged contractholders with interests of \$10 million or more indicates that larger single client accounts are assessed lower management fees than commingled accounts of comparable size. Thus, for example, using the ratios shown in Table VI-80 a "typical" commingled account of \$100 million consisting of ten participants with equal interests would incur a management fee of .124 percent whereas a \$100 million single client account would pay .084 percent. Obviously, the larger the number of interests in a commingled account, given its size, the higher is the management fee that will result. On the other hand, single client accounts charging a flat fee rate charge a somewhat higher fee than commingled accounts employing a fixed fee ratio.

When a cross section of flat fee rate accounts is examined, no correlation between the quoted fee rates and account size for single client accounts is found and little, if any, correlation exists for commingled accounts.²⁷⁹ Within a given insurer there also is no indication of correlation between the flat fee charge and account size; for some individual insurers the flat fee rate is identical for accounts of all types varying widely in size. Consequently larger accounts paying a flat fee rate tend to pay higher management fees than comparable sized accounts assessed according to a graduated schedule.

Tables VI-81, VI-82 and VI-83 show average actual fee rates by account type and size for each year, 1966 to 1969.²⁸⁰ Because of the limited number of separate accounts which had been in operation for four years as of end 1969 and because of the exclusions explained above, there are very small numbers of accounts represented in the larger size categories and in earlier years. Table VI-84 combines all the years and treats each account year as a separate observation.

²⁷⁸ If only size of participants' interest affected fee rates the fee rate would decline approximately 40 percent for each tenfold increase in commingled accounts and 60 percent for comparable increases in single client accounts.

²⁷⁹ Commingled accounts over \$50 million reported fees averaging about .15 percent; those under \$50 million average about .20 percent, with no relation between size and fee rate evident within the \$0-\$50 million range.

²⁸⁰ As explained above, fee rates are calculated as total charges for investment management services during the year, divided by the average of beginning year and end year long-term corporate security holdings.

Average fee ratios for registered accounts appear to be about .4 percent; for nonregistered accounts fee rates average about .2 percent. Since most accounts fall in the \$0-\$10 million size range, this generalization is valid for both accounts in that size category and for all accounts.²⁸¹ Single client accounts appear to have lower fee rates, as expected, in medium sized accounts (for example, \$5 to \$50 million). There are not enough larger accounts to determine whether significant differences between types of accounts exist for accounts over \$50 million. Furthermore, in comparing the Study's calculations of actual fee rates paid with expected fee rates derived from stated fixed rates or schedules, it appears there may be some systematic measurement errors in single client accounts which result in the actual fee ratios being biased downward for these accounts,²⁸² or else more negotiation downward from stated schedules occurred than was evident from the written responses. The pattern of a sharp decline in the fee rate for accounts above \$5 million is surprising (and perhaps suspect) as to the extent of the decline, although a substantial decline in this range was also suggested by the fee schedules summarized in Table VI-80.

In the nonregistered accounts there does seem to be a clear relationship between fee rates and account size. There is not an obvious time trend in fee rates, although there are examples of substantial increases in fee rates from one year to the next. In the more prominent of these cases, there also is an increase in the number of accounts in a size category in which an increase in the fee ratio is observed. This results from the growth of flat fee rate accounts into the next higher size category without any apparent adjustment in the fee rate. This evidence together with the lack of any apparent relation between account size and fee rate for the fixed fee rate registered accounts suggests that as accounts grow the fee ratio for flat fee rate accounts does not decline to the extent that fee ratios do for accounts employing fee schedules.

Finally, in order to examine the influence of several variables upon fee rates simultaneously, multiple regression analysis was employed. In these regression runs, all account year observations were pooled and the reporting year included as an independent variable. Regressions were performed with both account types pooled and separately for (1) commingled and (2) single client accounts. The dependent variable in all cases is the annual investment management fee charged in dollars divided by the average dollar value of total corporate security holdings in the account for the year in question.²⁸³

The regression results are shown in Table VI-85. The relationship between the fee ratio and the size of the account is expressed in log-log form which assumes that a given percentage change in account size

²⁸¹ However, the regression analysis summarized below (Table VI-85) indicates that when a number of factors are controlled, registered accounts do not charge higher fee rates than other commingled accounts.

²⁸² For example, taking the arithmetic difference between fee rates calculated from actual fees paid and fee rates inferred for each account for 1969 from the reported schedules, we found six registered accounts with a positive discrepancy (the actual rate exceeded the expected rate) and five with a negative difference (the expected rate exceeded the actual rate). For nonregistered commingled accounts there are twelve positives and twelve negatives, but for single-client accounts only nine positives and twenty-five negatives.

²⁸³ To qualify for inclusion in this analysis the corporate security holdings of an account had to exceed 75 percent of the account's total assets as of end 1969.

produces the same percentage change in the fee ratio.²⁸⁴ The regression analysis indicates that the fee ratio is sensitive to both the size of the account and the size of the insurer.²⁸⁵ Since account size and insurer size are correlated it is not possible to disentangle the separate effect of each.²⁸⁶ This intercorrelation is least significant for single client accounts; both size variables are statistically significant in regressions on these accounts and on all accounts. The results are consistent, however, with the finding above that fee rates for single client accounts decline more with increases in account size than is true for commingled accounts. In fact the regression coefficients indicate that a 100 percent increase in account assets will reduce the fee rate of single client accounts by 36 to 42 percent (depending on which of the two equations is used) while an equivalent increase in the size of a commingled account produces only a 6 to 15 percent decrease in the fee rate. Also, the results indicate that when account size and insurer size are given commingled accounts are charged higher rates than single client accounts. On the other hand the results suggest that when other factors are controlled for, registered accounts do not pay higher fee rates than other commingled accounts, contrary to what was expected from inspection of Table VI-84.

The reporting year variable consistently has a positive sign, indicating that fee rates were rising as time progressed, during the four-year period. This result is statistically significant for single client accounts, and for all accounts pooled, but is not for commingled accounts. This is consistent with the observation above that fees charged on a flat fee ratio basis, which is commonly used by commingled accounts, are relatively slow to change. None of the measures of services performed including turnover and activity rates, number of stocks held and the common stock-to-assets-ratio proved to have statistically significant influence upon the level of the fee rate.²⁸⁷ There were relatively few accounts included in this analysis in which clients designated brokerage and no effect of brokerage designation in fee rates is discernible. No accounts were included in which clients retained some investment discretion. The variables utilized in this analysis explain nearly 60 percent of the variance in fee rates for all accounts and about 70 percent when commingled and single client accounts are examined separately.

²⁸⁴ Inspection of Tables VI-80 to VI-84 suggested this was a closer approximation to the true relationship than a linear or log-linear formulation. This was verified by the regression fits which were better for the log-log version.

²⁸⁵ Insurer size is also transformed into logs in this equation. In this case the regression fit was not very sensitive to the form in which this variable was included, however.

²⁸⁶ For all accounts the correlation between these two size variables is .64; for commingled accounts, .79 and for single client accounts, .46.

²⁸⁷ Excepting the average number of stock issues held which was significant and positive (as expected) for commingled accounts.

Table VI-80

Average Fee Ratios by Size of
Contractholder's Interest:
Unregistered Accounts
1969 Schedules

	Commingled Accounts		Single Client Accounts	
	Number of Accounts	Fee Rate	Number of Accounts	Fee Rate
Flat Fee	34	.212%	11	.270%
\$ 100,000	23	.326	58	.582
\$ 500,000	23	.283	58	.342
\$ 1,000,000	23	.251	58	.326
\$ 5,000,000	22	.253	56	.184
\$ 10,000,000	20	.124	56	.142
\$ 25,000,000	20	.106	56	.108
\$ 50,000,000	17	.101	56	.097
\$100,000,000	17	.090	56	.084

Note: Averages are mean values.

Source: Responses to Study questionnaire Form I-50, question 19.

TABLE VI-81
 FEE RATIOS FOR REGISTERED ACCOUNTS
 CLASSIFIED BY ACCOUNT SIZE
 1966 - 1969

<u>Account Size (\$ million)</u>	<u>1966</u>	<u>1967</u>	<u>1968</u>	<u>1969</u>
0-10	(4) .42%	(6) .45%	(9) .34%	(12) .34%
10-20	(0) —	(0) —	(0) —	(1) .41
year average	(4) .42%	(6) .45%	(9) .34%	(13) .35%

NOTE: Figures in () indicate the number of accounts represented. Fee ratios are unweighted averages of rates for the number of accounts shown.

TABLE VI-82
 FEE RATIOS FOR NONREGISTERED
 COMMINGLED ACCOUNTS
 BY SIZE CATEGORIES
 1966 - 1969

<u>Account Size (\$ million)</u>	<u>1966</u>	<u>1967</u>	<u>1968</u>	<u>1969</u>
0- 5	(10) .25	(10) .23	(8) .19	(7) .25
5- 10	(3) .14	(2) .18	(4) .34	(4) .19
10- 20	(1) .09	(3) .16	(3) .16	(6) .27
20- 50	(1) .12	(1) .09	(3) .13	(4) .17
50-100	(0) —	(1) .11	(0) —	(1) .10
over 100	(1) .09	(1) .10	(2) .11	(2) .12
year average	(17) .20	(18) .18	(20) .20	(24) .21

NOTE: Figures in () indicate the number of accounts represented. Fee rates are unweighted averages of rates for the number of accounts shown.

TABLE VI-83
 FEE RATIOS FOR SINGLE CLIENT
 ACCOUNTS CLASSIFIED BY
 SIZE OF ACCOUNT
 1966 - 1969

<u>Account Size (\$ million)</u>	<u>1966</u>	<u>1967</u>	<u>1968</u>	<u>1969</u>
0- 5	(7) .34%	(16) .23%	(15) .24	(9) .21%
5- 10	(1) .06	(2) .06	(8) .06	(5) .10
10- 20	(1) .06	(1) .04	(1) .05	(3) .09
20- 50	(0) —	(0) —	(2) .04	(3) .04
50-100	(0) —	(0) —	(0) —	(0) —
over 100	(0) —	(0) —	(0) —	(1) .09
year average	(9) .27%	(18) .21%	(23) .17%	(34) .16%

NOTE: Figures in () indicate the number of accounts represented.
 Fee rates are unweighted averages for the number of accounts shown.

Table VI-84

Fee Ratios by Type of Account:
1966-1969 Results Combined

Account Size (<u>\$ millions</u>)	Registered <u>Accounts</u>	Non-registered Commingled <u>Accounts</u>	Single- Client <u>Accounts</u>
0 - 10	(31) .38%	(49) .22%	(72) .20%
10 - 20	(1) .41	(13) .20	(4) .08
20 - 50	(0) --	(9) .14	(7) .04
50 - 100	(0) --	(2) .10	(0) --
over 100	(0) --	(6) .10	(1) .09
All Accounts	(32) .38	(75) .20	(84) .18

Notes: Figures in () indicate the number of accounts represented. Fee ratios are unweighted averages of fee rates for the number of accounts shown.

Table VI-85

Regression Coefficients and 't' Values for Regressions With
Investment Management Fee Ratio as Dependent Variable

Account Type	Number of Observations	Account Size	Insurer Size	Commingle	Reporting Year	Registered	Common Stock Ratio	Number of Stocks	Brokerage Designation	Turnover Rate	Activity Rate	Constant	R ²
All Accounts	88	-.096 (-2.135)	-.248 (-3.555)	.293 (2.367)	.129 (3.009)	-.052 (-2.112)	-.596 (-1.128)					-7.819	.61
Commingle	47	.063 (1.182)	-.374 (4.780)		-.065 (1.238)	-.090 (-3.79)	.524 (.737)					-3.983	.67
Single Client	41	-.362 (-6.432)	-.238 (-2.410)		.145 (2.908)		-.633 (-1.043)					-4.883	.72
All Accounts	88	-.165 (-2.566)	-.238 (-3.095)	.349 (2.305)	.145 (2.527)	-.184 (-2.645)	-.585 (-1.240)	.004 (1.478)	-.015 (-.0966)	.025 (.063)	.043 (.114)	-8.184	.61
Commingle	47	-.154 (-1.886)	-.262 (-3.187)		.105 (1.742)	-.256 (-1.021)	.233 (.327)	.012 (3.012)	-.549 (1.129)	-.287 (-.699)		-5.945	.73
Single Client	41	-.416 (-5.102)	-.335 (-2.451)		.181 (2.275)		-.348 (-.494)	.0034 (.890)	.197 (1.158)	-.88 (-3.390)	.0948 (.208)	-4.795	.70

Regression Equation (\log_e) FEE RATIO = CONSTANT + $b_1 \log_e$ (Account Size) + $b_2 \log_e$ (Insurer Size) + b_3 (Commingle) + b_4 (Reporting Year) + b_5 (Registered) + b_6 (Common Stock Ratio) + b_7 (Average Number of Stocks Held) + b_8 (Brokerage Designation) + b_9 (Turnover Rate) + b_{10} (Activity Rate).

Note: The top number in each cell is the value of the regression coefficient. The numbers in () are 't' values.