brought to you by T CORE



Financial Institutions Center

The Competitive Performance of Life Insurance Firms in the Retirement Asset Market

by Harris Chorney Jill Goldman Olivia S. Mitchell Anthony M. Santomero

THE WHARTON FINANCIAL INSTITUTIONS CENTER

The Wharton Financial Institutions Center provides a multi-disciplinary research approach to the problems and opportunities facing the financial services industry in its search for competitive excellence. The Center's research focuses on the issues related to managing risk at the firm level as well as ways to improve productivity and performance.

The Center fosters the development of a community of faculty, visiting scholars and Ph.D. candidates whose research interests complement and support the mission of the Center. The Center works closely with industry executives and practitioners to ensure that its research is informed by the operating realities and competitive demands facing industry participants as they pursue competitive excellence.

Copies of the working papers summarized here are available from the Center. If you would like to learn more about the Center or become a member of our research community, please let us know of your interest.

Anthony M. Santomero Director

The Working Paper Series is made possible by a generous grant from the Alfred P. Sloan Foundation

The Competitive Performance of Life Insurance Firms in the Retirement Asset Market ¹

April 1997

This study is part of the Wharton Financial Institutions Center-KPMG Peat Marwick project on the Retirement Asset Market.

¹Harris Chorney and Jill Goldman are at KPMG Peat Marwick LLP. Olivia S. Mitchell and Anthony M. Santomero are at the Wharton School, University of Pennsylvania.

INTRODUCTION

At \$4.6 trillion in assets and reserves, the private retirement asset market is massive. It is growing both absolutely and relatively. Tens of thousands of workers are currently dependent on it, both directly and indirectly, for their livelihood. Millions more are dependent upon it for their future.

As the U.S. financial services industry prepares for rapid growth in the private retirement market, life insurers appear to be well-poised to meet consumers' rising needs for individual asset accumulation, decumulation, and risk protection products. At the same time, insurers must also meet competitive concerns arising from the entrance of new market players seeking to capture their own share of retirement dollars.

Many industry observers view life insurance firms as once-dominant players, now losing presence to new competitors in the retirement market. Mutual funds are seen as having attracted many general investors as well as those just beginning to plan for retirement. Additionally, banks also appear to be gaining ground, joining the combatants in the war for retirement assets.

In this paper, we report on the results of two studies examining the retirement asset market. These are part of an ongoing project examining the competitive position of insurance companies in this dynamic and changing financial sector, conducted jointly by the Wharton Financial Institutions Center and Peat Marwick LLP (KPMG). Our overview here will take a short but objective look at the place of life insurance companies and their products in the retirement asset market. We survey the available data on the size of the market, its required growth to accomplish the aim of satisfactory living standards for the future generation of retirees, and the critical factors for life insurer success in this attractive asset market.

The purpose of our effort is two-fold. First, it is to better comprehend consumer behavior relative to the accumulation and decumulation of assets. We ask whether consumers are saving adequately, where they are placing their money, and what specific products appeal to them. The larger study on this topic is described by Mitchell and Moore in a report available from both KPMG and the Wharton Financial Institutions Center. The second objective of our work is to provide a macro view of retirement asset flow: where assets are flowing institutionally, who have been the largest winners and losers thus far in the process, and how product mix affects competitiveness. Again, a fuller treatment of these issues can be found in a report by Hoffman and Santomero also available from KPMG and the Wharton Financial Institutions Center. Our goal in the present discussion is to offer an overview of the findings contained in these studies, so that the industry might both understand the trends and identify the opportunities offered in this market.

Specifically, our research points to several key findings.

- Household asset accumulation is currently considerably less than would be required for adequate retirement income. By any measure, large segments of the American population have accumulated far less than needed to meet replacement rate targets.
- 2) The household sector has little understanding of retirement asset needs and the complexities of the financial market. Yet, financial education alters retirement accumulation behavior in a constructive way. In short, education increases retirement savings.
- 3) Many households do not decumulate retirement assets optimally. Advice sought regarding decumulation options is oftenad hoc and rarely expert. As a result, people are probably

¹ See Olivia S. Mitchell and James Moore, "Retirement Asset Accumulation and Decumulation". Wharton Financial Institutions Center Working Paper, 1997.

² See Paul Hoffman and Anthony Santomero, "Life Insurance Firms In the Retirement Market: Is the News All Bad". Wharton Financial Institutions Center Working Paper, 1997.

buying too few life annuities with their retirement wealth, and may overpurchase term certain annuities when they do annuitize.

- 4) The retirement asset market itself is growing rapidly, however, as "baby-boomers" appear to be saving more rapidly than their parents (at the same stage in their life cycle).
- 5) The retirement products used by this generation have shifted substantially, such that:
 - a) defined benefit plans within the pension asset category are declining both as a
 percentage of wealth, and as a percentage of retirement assets;
 - b) corporate pensions of the traditional defined benefit type are declining in favor of participant directed accounts including Individual Retirement Account (IRA) and 401(k) plans;
 - c) annuities, offered primarily by insurance companies, have grown in importance relative to wealth, but have been slipping as a percentage of retirement assets.
- 6) The observed growth in mutual fund market share has been primarily at the expense of depository institutions, most notably in IRA and 401(k) assets.

These results and their implications are discussed at further length below.

ARE CONSUMERS SAVING ENOUGH

In addressing the question of whether people are saving enough, and what determines their saving patterns, it is worth noting that it is extraordinarily difficult to find out about Americans' saving rates and wealth levels. In fact, it is only recently that the inherently imperfect exercise of measuring wealth has become easier because of newly devised, quite elaborate, survey instruments described by Mitchell and

Moore. Another methodological issue is that determining how much retirement wealth is sufficient is somewhat controversial, since there are many different benchmarks against which household saving can be compared. While there is no single and simple "right" benchmark applicable to all people in every circumstance, the data suggest that some intriguing things are occurring in this market

Asset Accumulation

One invaluable source of data on retirement asset accumulation is the new Health and Retirement Study (HRS), a survey of over 7,600 households with at least one family member between the age of 51 and 61. At first glance, evidence from the HRS would seem to indicate that people near retirement are in a fairly comfortable position, once social security benefits and pension assets are included. Nevertheless the picture is not so rosy when we project people's assets to retirement age, and then compare what they will have to what they will need in retirement. Our estimates show that the median older American household faces a large saving task ahead, needing to save on the order of a quarter to a third of total annual income, in order to meet conventional replacement rate standards. Why, then, do households save too little?

One potential explanation is that some people simply might not be able to afford to save. This might be true, for instance, if income barely covers a subsistence level of consumption. However this view is not likely to hold for other than the poorest of the poor in the U.S.

A second possible explanation for undersaving recognizes the inherent difficulty of solving the household's planning problem. Many issues must be considered and assumptions made about inherently uncertain future variables including future income streams, interest rates to be earned on various asset classes, tax rates and issues, future inflation rates, and mortality. Also, calculated saving rates are quite sensitive to changes in assumptions, and people may disagree on what these assumptions should be.

In recent months various experts have begun to investigate whether people are able to forecast the future with any useful degree of accuracy. One researcher, Douglas Bernheim, finds American households sorely lacking in financial knowledge. He then links this financial illiteracy to underpreparation for retirement, and concludes that such ignorance may be depressing national saving rates.

Another rationale for too little saving may be lack of self control, a theme explored by Richard Thaler and colleagues. This theory contends that people face a conflict between a desire for immediate gratification versus a forward-looking need to save for the future. The psychological perspective asserts that people develop so-called "mental accounts," and treat money differently depending on which account it is attached to. Thus some income surprises tend to be consumed immediately, while others tend to be saved for future consumption. Thaler argues that people need to have funds deposited automatically through payroll deductions or mandatory saving of tax refunds, in order to achieve retirement accumulations of the desired magnitude.

In sum, analysts offer several different explanations for low saving rates. The relative importance of each of these reasons – lack of substantial income, poor understanding of financial issues, psychological issues, or the unintended influences of government programs – is the subject of much active and ongoing research.

Tax Inducements and Employer Education

Tax inducements via IRAs, 401(k)s, and other programs do seem to motivate some people to save for retirement, although to what degree is still a matter of dispute. Recent changes to IRA contribution limits increasing deductibility for couples, as well as proposals by the Administration to further raise contribution limits, will provide natural experiments to help sort out the value of these deductions.

Another very promising development is that employers across the country have begun to find new ways to get employees to save for retirement within the venue of company-sponsored pension plans. One approach is to have employers offer financial education programs that have a strong positive effect on workers' saving patterns. Specifically, where employer-sponsored retirement education is provided, plan participation is higher, and median 401(k) balances in pension plans are almost two-thirds larger than without the training. Also, education increases participation and contribution rates most powerfully among non-highly compensated employees, raising participation rates for non-highly compensated employees by twice as much as for highly compensated employees. It also turns out that providing specifically tailored communication about a particular company's plan has much the same positive impact; the most potent effect is for in-person seminars over written plan materials, and frequent seminars increase participation significantly. A related finding is that retirement education appears to be strongly influencing retirement wealth and savings flows, but it is not related to respondents' total net worth. In other words, employer-provided retirement education produces wholesale changes in saving behavior, and not just small changes at the margin.

There are two potential concerns associated with employer education. The first, that a significant fraction of the U.S. workforce is not currently covered by employer-sponsored plans, even though this is the population segment that arguably most needs financial education. The second concern is that employers have a continuing concern regarding fiduciary liability. This arises if companies providing financial education end up taking on some risk when participants complain about pension plan performance. Since the courts are currently hearing legal arguments on this point, it is likely that employers will proceed somewhat cautiously on the financial education front for the near future.

Financial Advice

A great deal of investment advice is proffered to investors by the large and growing industry of financial advisors. This group generally advises conservative investors to hold the majority of their assets in bonds,

while aggressive investors are encouraged to hold stock. But is such advice sought, and if sought, heeded? Unfortunately, it appears that the average American saver has a long way to go in becoming a savvy investor.

Evidence on this point is summarized in Table 1, and shows that only than half of a nationally representative survey of American households questioned sought financial advice. Of those, the vast majority (57%) obtained information from relatives and friends. Only a quarter of the people contacted a financial professional for financial advice including bankers (26%), brokers and accountants (17 and 14%), and tax advisers and lawyers (9 and 11% respectively). Differences by income level are not surprising: people earning \$25,000 or less were far more likely to consult friends and relatives than average, while higher-paid respondents were much more likely to go to brokers, bankers, and accountants. (Similar differences were observed by wealth level).

-- Table 1 --

When responses about peoples' sources of advice are then linked with information on their financial portfolios, several interesting conclusions emerge (holding constant age, education, earnings, sex, ethnicity, retirement and marital status):

Households indicating they obtained any financial advice had more types of financial assets. The positive effect of friends/relatives and brokers on diversification was stronger than for other types of advice.

 Households reporting that they relied on friends and relatives had saving rates that did not differ from non-users. On the other hand, those consulting brokers had higher-than-average saving rates; in some cases, people who used bankers and lawyers had lower-than-average saving rates. Households getting financial advice held 25% more assets in stocks and mutual funds, and the
positive effect was strongest for those working with brokers.

Why people obtaining financial advice should save differently, and in particular why brokers should have the strongest effect on saving rates and asset diversification, remains to be determined. A possible explanation for the phenomenon might be that brokers are able to explain risk and return patterns to financially naïve investors in a way that influences their investment patterns.

Asset Allocation/Investment Patterns

It has long been conventional wisdom that defined benefit pension plans tend to hold far more of their portfolio in equities than do defined contribution pension plans, perhaps because of the expectation that individual participants are more risk-averse than are group pension trustees. However, a glance at Table 2 indicates how wrong this common perception has become in the 1990's.

-- Table 2--

Specifically, large single-employer defined benefit pension plans hold about half their assets in equities, a fraction not very different from the current holdings of defined contribution plans. Though these figures depend somewhat on when the data were collected and by which group, the defined benefit/defined contribution equity fractions are around 60%., with the fixed income holdings falling to around 30% (with the rest in cash and other assets). In general, the message is one of similarities rather than discrepancies across pension plan type.

Based on this finding, it seems that excessive conservatism among defined contribution investors is currently not a matter for substantial concern. Overall, in fact, the results suggest that defined

contribution asset allocation patterns are roughly consistent with those suggested by the financial press for the moderately risk averse investor described above. One reason that this might be true now, although less true in the past, is that participants in defined contribution pension plans have moved away from guaranteed investment contracts (GICs) over time. In 1996, for instance, GIC representation was almost 40% lower than in 1990. Another reason for the higher-than-anticipated current concentration of stocks in defined contribution pension portfolios is that "[a]s the stock market rises, participants don't necessarily rebalance their 401(k) asset allocations the way pension executives rebalance defined benefit plan allocations". This suspicion is confirmed with a glance at the figures in Table 2, above. In 1983, the typical large defined contribution pension held 39% of its fund in equities; a decade later, that fraction had risen to 45%. By contrast, defined benefit equity holdings either held constant or fell slightly, according to the survey information.

A more detailed investigation of this conclusion is warranted since averages conceal important details. For example, knowing whether asset allocation patterns differ across the population according to sociodemographic traits might be a first step toward asking whether these patterns are intentional or accidental. To this end, the first panel of Table 3 reveals asset allocation patterns by age from a survey of 24 large employers with 401(k) pension plans covering 36,000 employees.

-- Table 3 --

One interesting finding is that workers over age 60 hold little of their retirement portfolio in equities — less than 15% — while people younger than 40 buy stock or stock funds with close to half of their 401(k) money. The all-employee average for the sample was 34% of assets held in stock, including stock funds, company stock, and international stock funds. The overall inverse relation between age and equity holding suggests less risk aversion among the younger population, although even people in their 40's were found

-

³ Fred Williams. "Equities Top 62% of 401(k) Assets" Pensions and Investments, January 20, 1997.

to hold as much as 40% in equities in their 401(k) plan. Conversely, assets held in fixed-income investments rose from about 40% for people in their 20's, to more than double that for people over age 60.

Asset allocation patterns may also be viewed in relation to participant earnings, as indicated in the second panel of Table 3. Here the average employee is seen to devote half his pension contribution to stock funds, or as much as 64% on equities if the other two stock categories are included. Interestingly, those earning up to \$60,000 put at least half of their investments in balanced income funds; only those in the top brackets (earning over \$60,000) invest less than half of their money in the balanced fund (and instead emphasize pure equity funds). Fixed income holdings represent a relatively small portfolio fraction, never above 20%, but the fraction rises with pay. The lower-paid group is less likely to invest in any form of corporate stock than the higher-paid, yet the low-wage group still devotes a third of the portfolio or more to stock. It is possible, of course, that high earners buy equities early in life and bonds later to offset depreciating human capital, while low earners have less reason to buy equities to offset human capital risk.

Asset allocation patterns may also be analyzed by gender, which is described in the last panel of Table 3. In this survey, at least, men and women behave quite similarly: pension accumulations as well as new contributions devoted to equities stand at about 50%, and fixed income amounts at about 40-45%, for both sexes. In other words, this survey suggests that plan participants in the private sector 401(k) pensions are following the "moderate investor" advice recommended in the industry, and the results do not differ by sex.

RETIREMENT ASSET DECUMULATION

In addition to looking at the retirement asset accumulation phase, we also examined what influences asset decumulation patterns in retirement. Among the most prominent factors are people's expectations about

the future – their own anticipated longevity, the probability of poor health and need for nursing home care, and future macroeconomic variables including inflation and interest rates. Taxes and government benefit programs probably also play a powerful role in asset decumulation patterns. In addition, people's risk aversion and discount rates are also likely to influence how they hold retirement assets and how quickly they draw down their assets in old age.

One way to explore workers' and retirees' expectations would exploit the HRS survey, since it asked respondents about anticipated life expectancy, inflation rates, as well as risk aversion. Because the data have just begun to be examined, we only have initial results, one of which suggests older people seem to have a quite accurate estimate of their own life expectancy. By comparing self-reported longevity probabilities with actuarial life tables, it can be concluded that both men and women seem to quite accurately assess their own chances of survival to age 75 and 85.

Also of interest is the conclusion that HRS respondents expecting to live longer than average have accumulated more than average assets. This indicates that there is quite likely a link between saving and anticipated retirement needs. Future research will be able to determine whether those expecting to live longer than average also handle their asset decumulation differently – for example, by drawing down their wealth more slowly, by buying annuities, and by having pensions of the defined benefit rather than the defined contribution variety. Future research will link people's anticipated health problems, forecasts of macroeconomic variables, risk aversion, and discount rates to saving patterns as well.

Asset Decumulation and Annuitization

Several other factors also influence asset decumulation patterns, including the relative price of holding different assets and unwinding them. One important issue is the cost of annuities available for purchase in the marketplace, and in decades past there has been much concern over the administrative costs as well as

adverse selection loading implicit in annuity pricing. But recent research suggests that adverse selection and insurance loads have declined of late, making this insurance product much more favorable to retirees reaching retirement age in years to come.

On a related note, retirees in years gone by tended to be covered mainly under defined benefit pension plans, but increasingly workers and retirees now hold a defined contribution accumulation. Not only have plan types changed, but features of existing plans have also adapted to competitive pressures. Thus until recently, defined benefit pensions required retirees to take an annuity payout, but in the last decade employer surveys show that they are allowing eligible retirees to receive increasing portions of their benefits in lump-sums at retirement. Of course, in defined contribution plans, lump sum cashouts have always been the norm.

This switch from defined benefit to defined contribution plans represents a change in risk-bearing patterns for retirees. As compared to employees in defined benefit plans, defined contribution retirees face two different sources of risk. The first is that they directly bear the risk of their portfolio's investment performance after retirement. If asset performance is sub-par, retirees must reduce consumption or reduce depleting their assets. The second is longevity risk. Unlike DB retirees who typically received annuities until death, the DC retiree who does not annuitize faces the risk of outliving his assets – even if returns are strong. That is, annuitization of retirement wealth provides a means of pooling longevity risk. This becomes a matter of even greater concern should proposed changes to Social Security convert part of the federal system into a national defined contribution account, since the need for retirement annuitization will be further exacerbated.

One question that remains to be studied is how pension-covered workers are responding to the new availability of pension lump sums. Policymakers' concern has been that people might pervert the intent of the pension system by spending the money unwisely. To discourage such behavior, the federal government has levied an excise tax on pension funds distributed before the recipient is age 55; someone

withdrawing his fund early pays this penalty plus income tax on the amount. Research on the effect of this excise tax suggests that low-income recipients are not deterred much from cashing out their lump sums, but higher income workers are discouraged from taking the funds prior to retirement. It also appears that the higher the value of the pension lump sum amount, the more likely a participant is to roll it over into a tax qualified account rather than spend it.

In any event, the important question remains as to how people are investing their rollover and lump sum pensions during the retirement phase. Though no systematic research casts light on the subject, anecdotal evidence suggests that most workers who are granted the option of taking cash from their pension accounts are doing so, rather than purchasing life annuities through group retirement plans. This is surprising, and somewhat discomfiting, since an employer-provided group life annuity would tend to be priced at group rates below those available to individual purchasers of annuities (for adverse selection reasons as well as because of scale economies). The size of the group discount would of course vary with group characteristics; on the other hand, group administration and overhead costs are about half those associated with individually-priced annuities.

When thinking about annuity issues there is another matter that needs to be more fully recognized, which is that people seem to be increasingly likely to buy guaranteed-period certain options rather than simple life annuities. This is evident in a recent survey of higher education faculty and researchers, which shows that participants are increasingly likely to select 10-year and 20-year certain options, rather than single life annuities preferred in the past. In addition, people now tend to hold their defined contribution accruals as a variable annuity into retirement rather than taking a fixed annuity payout, notwithstanding the additional capital market risk imposed on the retiree by this strategy.

Putting these trends together, it appears increasingly likely for pensioners to lay claim on part or all of their pension assets without annuitizing them, in contrast to common practice in years past. If this trend continues, it suggests that ever larger segments of retiree wealth will move into the nonannuitized, and

potentially bequeathable category; this will place increasing responsibility on retirees to manage the decumulation phase more carefully than ever before.

The evidence suggests that potential markets for annuity products that have been largely untapped are concentrated among the middle three-fifths of the income distribution. Traditional marketing has focused largely on high net wealth individuals in the top income quintile who can generate large dollar purchases and sizable single-sale commissions. While this market may not be tapped out, it is relatively crowded. Therefore an opportunity and a challenge for the life insurance industry is to develop and market annuity products that can be sold to a large middle market with small individual scale. Successful products will likely be highly standardized to minimize cost. Marketing of these products likely will focus on already existing collectives of individual purchasers such as 401(k) plans. Ties to these sorts of institutions will enable insurers to heighten needed saving education among participants and also to alert savers to the role of annuities in the decumulation phase.

CHANGING FORTUNES IN RETIREMENT PRODUCTS

The discussion thus far shows just how much the world has changed. Not too long ago, a listing of retirement assets would have been quite short. Pensions offered by large firms made up the bulk of non-government retirement assets, with most individuals relying on banks or retail mutual funds for additional assets earmarked for decumulation after retirement. What has changed during the second half of this century is that a number of tax-advantaged retirement asset categories developed, assets that now constitute the bulk of retirement savings. We begin our examination of the dynamics of this product market by starting with the old standard, the pension fund market. A more detailed discussion of each of these points appears in the companion study by Hoffman and Santomero.

Pension Assets

The term "pension" was at one time synonymous with a corporate pension plan which was provided solely by a worker's employer. This category was divided between defined beneft(DB) plans, where contributions are variable and the benefits are fixed and defined contribution (DC) plans, where contributions are fixed and benefits variable. It is on the defined contribution side where the picture can be a little opaque. In many cases the employee is able toontribute with the corporation matchingthese contributions to some degree. This employee aspect has become increasingly important in recent years Therefore, it has become difficult to divide the retirement market strictly into employer and employee sectors. We will proceed with this in mind.

Over the period from 1980 to 1993 the combined assets of private sector DB and DC plans grew from \$563.6 billion to \$2.3 trillion; see Table 4.4 Insurance company and IRA figures - which are usually reported separately - increase the total to \$4 trillion. With inflation and wealth ever increasing over this period, these figures do not convey much more than that market size has grown precipitously Therefore, we report the combined market benchmarked against total wealth. In this case, the sector can be seen to have risen from 11% in 1983 to 14% in 1995. As can be seen in Table 5, the general trend has been upward with the single exception of the period following 1985.

--- Table 4 and 5 ---

In is important to note that this gradual upward drift in private retirement pension plan assets conceals a dynamic shift in the makeup of this sectorIn particular, there has been a dramatic reallocation awayfrom defined benefit pensions toward defined contribution plans. In 1980, defined benefit assets were 2.5 times

-

⁴These figures, covering private pension plan assets alone are calculated by the Department of Labor from Form 5500 filings with the IRS. The process has not been automated and is therefore subject to a lengthy delay of approximately three yearsPublic sector plan assets are not discussed here in detail.

that of defined contributionassets. By 1993, the last date available, defined benefitssets were only 1.17 times that of defined contributionplans. The trends indicate that the two plans are likely nearly at parity at present. Evidence described in our report illustrates that DC programs have substantially replaced these DB plans within the corporate pension fund market over this period. This is true even while the total is declining as a percentage of wealth. This result is hidden by the dramatic increase in 401(k) assets.

Individual Retirement Accounts

During the period 1984 to 1993, individual retirement account assets rose impressively from 10% to 23% of total pension assets (Table 6). Due to changes in the tax code, contributions have fallen considerably since their peak in 1985. Therefore, the increase in total IRA assets can be attributed to appreciation in asset value, lump sum rollovers and the expanded use of IRA accounts in the nascent Simplified Employee Pension (SEP) market.

-- Table 6 --

The four main institutional players in the IRA market are: depository institutions (commercial banks, thrifts, and credit unions), investment brokerage firms, mutual fund complexes, and life insurance companies. Table 7 demonstrates the dramatic changes in relative share experienced by these institutions in the last ten years. Mutual funds and brokerages have made sizable inroads into depository institutions' share. Depository institutions have seen their share decline from 61% in 1985 to 21% in 1995. Mutual funds and brokerages have picked up 40% of this drop: mutual funds increasing from 16% to 35% and brokerages from 15% to 36%. Part of this change can likely be explained by the greater general long-term appreciation of equities. Nonetheless, notice that insurance companies have retained a small and relatively flat share, hovering around 8%.

IRA contribution rates are very sensitive to changes in the tax code. At present, the tax milieu is relatively unfavorable, so contributions have remained low. The majority of fee income is, therefore, to be derived from management of this huge asset pool. Changes in relative institutional share will likely be dependent upon making inroads into the rollover market, and the new SEP-IRA market, but the data suggests depositories are clearly losing share to the equity market alternatives offered by mutual fund complexes and brokerage firms.

A recent study of IRA contributions from 1987 to 1990 found that for every newly initiated rollover account, contributions were continued in 3.85 existing accounts. The pattern is reversed if we look at dollar amounts. A typical rollover account has an annual contribution of 3.21 times that of a regular account. Of course, this figure is statistically misleading since it incorporates the large initial amount. Nonetheless, both the number of accounts and the dollar amounts moved in favor of rollover accounts during this period. The ratio of existing accounts to rollover accounts decreased from 4.92:1 in 1987 to 3:1 in 1990. The dollar ratio of rollovers to regular contributions increased from \$1.99:\$1 to \$4.58:\$1. A similar trend regarding the increasing percentage of IRA funds attributed to rollovers can be seen in the mutual fund market. During the period from 1992 to 1994, rollover assets increased from 27% to 34 % of total IRA assets.

Consequently, one way insurance firms can potentially gain market share here is by being more aggressive in the rollover competition. This implies a need to be more responsive to the desires of retail customers to participate in equity ownership, as fixed rate asset choices seem to be losing market share to equity participation according to the data.

_

⁵ Employee Benefit Research Institute *EBRI Databook on Employee Benefits* 3rd Edition, 1995, p. 194.

⁶ National Underwriter, Life & Health/Financial Services Edition anuary 29, 1996, p. 7.

401(K) Accounts

This segment of the retirement market is currently slightly less than 70 % of IRA balances. As of year-end 1993, total assets were \$616.3 billion. With the downturn in IRA contributions, 401(k) accounts have rapidly taken up the slack. As noted above, annual contributions have risen uninterrupted from 1986 to 1994. Unlike IRAs, both contributions and asset levels have increased rapidly. This has led to an increasing share of the total assets of the pension market. In 1984, 401(k) accounts represented only 7% of total retirement assets. By 1993, their share had risen to 17% (see Table 6 which uses the higher figures from the Department of Labor).

Data on the institutional makeup of the 401(k) market are sparse since the mutual fund industry is the only industry that regularly reports its market share. Between 1986 and 1994, mutual funds saw their 401(k) share rise from 8 % to 31%. The rapid growth in the 401(k) market provides opportunities for both new accounts and maintenance of outstanding accounts for all segments of the financial sector.

As with IRAs, rollovers are another avenue by which to make market inroads. However, in both cases, success of the insurance industry depends upon their ability to offer individuals products which permit access to equity participation, and offer a wide range of investment options. Depository institutions have been losing market share in these two markets precisely because they have not offered their customers a wide range of investment options. The insurance industry cannot afford to make the same mistake.

Annuities

Annuities represent the second largest segment of the retirement market. In the last year in which aggregate totals are available, 1993, annuities held 20% of the market (IRAs were first with 23 % and 401(k)s followed with 17%), see Table 6 above. As would be expected, insurance companies are dominant in the distribution of this product with a market share in 1993 of 76%. In raw dollar amounts,

annuity reserves totaled \$1.041 trillion, of which insurance companies classified \$733.9 billion as being retirement targeted. It must be kept in mind that these figures understate retirement annuity totals. Many individuals make purchases of annuities which are not recorded in the retirement figures because of their lack of favorable tax treatment. Table 8 reveals that insurance company annuities have slightly decreased their share of total retirement assets; from 20% in 1983 to 19% in 1995, peaking in 1988 with 22%. This trend is a bit misleading because the quantity of annuities which are not tax advantaged is increasing relative to those that are. Only tax advantaged annuities are classified by insurance companies as being earmarked for retirement.

-- Table 8 --

Annuities are sold through many avenues in addition to direct sales by insurance companies. Banks are a new and increasingly important distribution channel. An ominous note for life insurance companies is that their share of initial sales fees may be declining. Their share of this revenue in the increasingly popular area of variable annuities was 55% in 1994 and decreased slightly to 43% by 1995. It is projected by some to drop to 30% by the year 2000. This trend could be compounded by the announced intention of banks to create and market their own annuities, as opposed to merely selling those of insurance companies.

LIFE INSURERS MARKET SHARE OF PRIVATE RETIREMENT ASSETS

Much has been written about insurance companies' slipping competitiveness in the retirement asset market. Overall, between 1983 and 1995, life insurance companies have decreased their share of the retirement market from 23% to 21% (see Table 9). In five years, their market share dropped from 26% in 1990 to 21% in 1995. If allowed to continue, this decline could signal a larger problem for life insurers as they seek to compete in the marketplace.

-- Table 9 --

In their traditional stronghold of annuities, life insurers remain strong. Many investment firms and banks have proclaimed their intention to challenge the insurance industry in this area, but they have yet to do so with much visible success. Of greater relevance is the industry's own need to maintain effectiveness and cost efficiency in its delivery systems to remain competitive.

The similarity of variable annuities to mutual funds has been a major reason for their success. But herein may lie the problem. Variable annuities tend to have higher fees associated with them than traditional mutual funds. As we know, part of these fees go to options such as life insurance attachments and principal protection. But, as with load mutual funds, these fees will hurt long-term performance.

Performance may be further affected by poor fund management or, at least, low risk portfolio choices. As consumers become more savvy, these performance inhibitors may nullify the value of insurance attachments and subsequently, variable annuities may lose their commercial luster.

In fact, the success of insurance annuities is somewhat problematic. Annuity premium income has eclipsed traditional sources of income such as life and health insurance (see Table 10). We have seen a fundamental shift to a dependence on the retirement market. It is for this reason that insurance companies should be wary of inroads to their annuity share.

-- Table 10 --

As far as the life industry's potential in the other areas, the picture is decidedly mixed. They have slipped from their IRA market share peak of 11% in 1990 to 8% at year-end 1995. However, at the same time, IRA assets' proportion of insurance company pension assets has increased from 3 % in 1983 to 10% in 1995 (see Table 11). Therefore, despite losing market share, IRAs have become increasingly important to insurance companies' earnings and asset growth as shown by the increasing share of IRA funds set aside

as part of insurers' total retirement reserves. They cannot afford to passively lose this market to the mutual fund industry, as depositories have done. They must compete with a wider array of products and at a competitive fee structure. Otherwise, their share will follow that of banks and thrifts in the last decade.

-- Table 11--

Finally, the explosion in the 401(k) market should send a signal to all players in the retirement market that complacency can lead to missed opportunity. This area, as with that of IRAs, is marked by rapid account turnover. The rollover market is many times larger than that of account initiation. Perhaps this is the mechanism through which life insurers can win back market share from mutual funds. It is clearly too big to ignore, and a key competitive opportunity for the industry as a whole. However, it remains to be seen whether life insurers will accept the challenge.

NEW DYNAMICS NEW DIRECTIONS

Our overview of the retirement asset market points to several steps that insurers must take to ensure growth, success and profitability. The challenges for the industry are to maintain its dominant position in the annuity market; to recognize that the defined benefit and defined contribution pension categories are aged markets, subject to relative, if not absolute, decline; and to compete effectively in the new and growing 401(k) and IRA segments of the retirement arena.

Insurance companies have seen their share of the retirement assets market slowly erode over the last decade. Their niche and strength is annuities. They should be wary of inroads here associated with delivery system weaknesses or excessive fees. At the same time, they must look for opportunities for expansion in the IRA and 401(k) markets. Opportunity may come via traditional routes, such as the

rollover market, or by creative avenues, such as product innovation. In any case, action must be taken to stabilize their position in the pensions market. They are not likely to show a disastrous loss in market share akin to that experienced by depository institutions in the IRA market, but attention should be directed to shoring up their annuity strength and diversifying to guard against the inefficacy of these measures. Recognizing their dependency on the retirement market should be a call to arms to fight for every retirement dollar.

We also find a number of new opportunities for insurers at retail market level. As baby boomers begin to worry about retirement, they will begin to recognize the saving deficit that they confront in order to achieve economic security in their old age. Employers too are identifying new tools to help them build an environment in which employee retirement saving can be done more sensibly. All of this requires powerful efforts to combat deep-rooted financial illiteracy, a problem that plagues the household sector. This report has noted where the educational efforts are beginning to pay off, and the types of mechanisms that seem to afford the most promise. We believe that the middle income market is potentially ready to make substantial changes in saving patterns, if financial institutions can only provide low-cost, relatively simple vehicles to achieve this end. Insurers face potentially great opportunities in this market, yet substantial challenges in providing retirement accumulation as well as decumulation services to individual households of rather modest wealth.

 Table 1: Financial Advice Sought By Average Americans

Type of Advice Used Among Those Using

| - | ing Source | Friend/ <u>Relative</u> | Banker | Broker | Acc't | Tax Adv. | Lawyer |
|-----------|------------|----------------------------|--------|--------|-------|----------|--------|
| All | 45% | 57% | 26 | 17 | 14 | 9 | 11 |
| By Income | ę | | | | | | |
| <10K | 41 | 64 | 29 | 6 | 6 | 1 | 14 |
| 10-25K | 47 | 61 | 27 | 12 | 9 | 5 | 10 |
| 25-50K | 43 | 54 | 25 | 19 | 17 | 14 | 8 |
| 50-100K | 58 | 39 | 20 | 42 | 34 | 9 | 11 |

Source: Cited in Mitchell and Moore (1997)

Table 2: Pension Plan Investment Portfolios by Plan Type

Pension Fund Assets by Asset Type

as a Fraction of Net Assets

| | Year | Equity | Bonds/FI(*) | Real Estate | Cash | Other(+) |
|--------------------------------|------|-------------|-------------|-------------|------|----------|
| I. Private Defined Benefit | | | | | | |
| Trusteed Single Employer | 1983 | 45% | 27% | na | 9% | 19% |
| " | 1993 | 42% | 27% | na | 9% | 21% |
| Greenwich DB Universe | 1992 | 57 % | 30% | 5% | 4% | 4% |
| P&I Top 1000 DB Plans | 1992 | 53% | na | | | |
| " | 1995 | 56 % | 34% | | | |
| 11 | 1996 | 57% | 33% | | | |
| Large (>100Ees) | 1993 | 46% | 38% | na | 6% | 10% |
| II. Private Defined | | | | | | |
| Contribution | | | | | | |
| Trusteed Single Employer | 1983 | 39% | 22% | na | 15% | 24% |
| H . | 1993 | 45% | 23% | na | 13% | 19% |
| Greenwich DC Universe | 1992 | 50 % | 40% | 0% | 8% | 3% |
| Greenwich 401(k) Universe | 1992 | 47% | 43% | 7% | 2% | 8% |
| P&I Top 1000 DC Plans | 1992 | 48% | na | | | |
| II | 1995 | 52 % | 33% | | | |
| n . | 1996 | 60% | 30% | | | |
| Large (>100Ees) | 1993 | 45% | 33% | na | 8% | 14% |
| III. Private Multiemployer | | | | | | |
| Trusteed | 1993 | 39% | 36% | na | 9% | 16% |
| IV. Public Defined Benefit | | | | | | |
| Greenwich DB Universe | 1992 | 44% | 44% | 6% | 5% | 8% |
| V. Public Defined Contribution | | | | | | |
| Greenwich DC Universe | 1992 | 33% | 54 % | 8% | 5% | 9% |

Notes

Source: Mitchell and Moore (1997)

^(*) Includes GIC's and Insured funds.

⁽⁺⁾ Totals may not sum to 100% due to rounding.

Table 3: 401(k) Assets In Specified Investment Holdings by Participant Age and Income

Plan Participant Age

| Investment Category | 21 - 30 | 31 - 40 | 41 - 50 | 51 - 60 | >60 | Total |
|----------------------------|---------|---------|---------|---------|-----|-------|
| Stock Fund | 39% | 36% | 30% | 22% | 10% | 25% |
| Company Stock | 11 | 9 | 6 | 6 | 3 | 6 |
| International Stock | 3 | 3 | 4 | 3 | 1 | 3 |
| Balanced | 6 | 8 | 11 | 8 | 1 | 8 |
| Fixed Income | 41 | 43 | 49 | 62 | 85 | 58 |

Plan Participant Earnings (\$K)

| | | | | | | 0 \ ' | | |
|----------------------------|-----|-------|-------|-------|-------|-------|--------|-------|
| Investment Category | <15 | 15-25 | 25-35 | 35-45 | 45-60 | 60-75 | 75-100 | Total |
| Stock Fund | 25% | 22% | 20% | 19% | 25% | 42% | 45% | 52% |
| Company Stock | 7 | 8 | 8 | 7 | 7 | 11 | 8 | 2 |
| International Stock | 1 | 1 | 2 | 2 | 2 | 4 | 6 | 10 |
| Balanced | 62 | 63 | 62 | 67 | 53 | 32 | 26 | 27 |
| Fixed Income | 6 | 7 | 9 | 7 | 12 | 11 | 15 | 8 |

Source: Goodfellow and Scheiber (forthcoming), cited in Mitchell and Moore (1997)

| Investment Category | Past Accumulation | New Contribution Allocation | | | |
|--------------------------|-------------------|-----------------------------|-----|-------|--|
| | Men | Women | Men | Women | |
| | | | | | |
| Diversified Equity Index | 14% | 13% | 42% | 44% | |
| Employer Stock | 41 | 42 | 19 | 17 | |
| Fixed Income | 45 | 45 | 39 | 40 | |

Source: Bajtelsmit and Vanderhei, cited in Mitchell and Moore (1997)

<u>Table 4</u>
<u>Assets of Private Pension Plans (Excluding Ins. Cos.)</u>
(\$ Billions)

| | <u>DB</u> | DC | <u>Total</u> |
|------|-----------|----------|--------------|
| 1980 | 401.455 | 162.096 | 563.551 |
| 1981 | 444.376 | 184.540 | 628.916 |
| 1982 | 553.419 | 235.567 | 788.986 |
| 1983 | 642.359 | 281.111 | 923.470 |
| 1984 | 700.669 | 343.922 | 1044.591 |
| 1985 | 826.117 | 426.622 | 1252.739 |
| 1986 | 895.073 | 487.837 | 1382.910 |
| 1987 | 877.269 | 525.219 | 1402.488 |
| 1988 | 911.982 | 591.653 | 1503.635 |
| 1989 | 987.971 | 687.626 | 1675.597 |
| 1990 | 961.904 | 712.236 | 1674.140 |
| 1991 | 1101.987 | 834.284 | 1936.271 |
| 1992 | 1146.798 | 947.289 | 2094.087 |
| 1993 | 1248.180 | 1068.092 | 2316.272 |

<u>Table 5</u>

<u>Total Private Retirement Assets Related To Total Weal</u>th
(\$ Billions)

| | <u>Share</u> |
|---------------------------------------|--------------|
| 1983 1184.725 11158.700 10.62° | % |
| 1984 1327.515 12407.500 10.70 | % |
| 1985 1694.075 14443.300 11.73 | % |
| 1986 1850.990 16557.600 11.18 | % |
| 1987 1987.520 17802.600 11.16 | % |
| 1988 2174.255 19457.400 11.17 | % |
| 1989 2545.190 21466.400 11.86 | % |
| 1990 2675.200 22230.800 12.03 | % |
| 1991 3037.950 24481.100 12.41 | % |
| 1992 3327.415 26066.700 12.77 | % |
| 1993 3702.675 28326.100 13.07 | % |
| 1994 3911.560 29508.800 13.26 | % |
| 1995 4593.560 33541.900 13.69 | % |

<u>Table 6</u>

<u>Instrument Share of the Retirement Asset Mark</u>et (Percent)

| | <u>IRA</u> | <u>401(k)</u> | Annuity |
|------|------------|---------------|----------------|
| 1984 | 9.93% | 6.91% | 20.98% |
| 1985 | 11.72% | 8.50% | 19.58% |
| 1986 | 14.89% | 9.87% | 21.12% |
| 1987 | 16.79% | 10.84% | 21.94% |
| 1988 | 18.08% | 12.74% | 22.39% |
| 1989 | 18.25% | 14.03% | 21.08% |
| 1990 | 19.76% | 14.39% | 22.24% |
| 1991 | 21.63% | 14.49% | 21.81% |
| 1992 | 22.42% | 16.62% | 20.45% |
| 1993 | 23.43% | 16.65% | 19.82% |

Table 7

Institutional Share of the IRA Market

| | Depository Inst. | Brokerages | Mutual Funds | Insurance Cos. |
|------|-------------------------|-------------------|---------------------|----------------|
| 1985 | 61.00% | 14.70% | 15.80% | 8.50% |
| 1986 | 56.50% | 16.20% | 19.40% | 7.90% |
| 1987 | 52.30% | 17.40% | 21.40% | 8.90% |
| 1988 | 51.60% | 17.30% | 21.90% | 9.20% |
| 1989 | 47.90% | 17.60% | 24.00% | 10.50% |
| 1990 | 45.20% | 19.90% | 24.10% | 10.80% |
| 1991 | 39.20% | 27.50% | 25.70% | 7.60% |
| 1992 | 34.10% | 30.10% | 28.30% | 7.50% |
| 1993 | 28.00% | 31.30% | 32.70% | 8.00% |
| 1994 | 25.50% | 33.70% | 32.40% | 8.40% |
| 1995 | 21.30% | 35.50% | 35.20% | 8.00% |

<u>Table 8</u>

<u>Insurance Co. Annuities- Share of the Private Retirement Market</u>

| | Ins. Annuities | Total Reserves | Ins. Annuity Share |
|------|----------------|----------------|--------------------|
| 1983 | 241.439 | 1184.725 | 20.38% |
| 1984 | 278.487 | 1327.515 | 20.98% |
| 1985 | 331.731 | 1694.075 | 19.58% |
| 1986 | 390.986 | 1850.990 | 21.12% |
| 1987 | 436.095 | 1987.520 | 21.94% |
| 1988 | 486.779 | 2174.255 | 22.39% |
| 1989 | 536.459 | 2545.190 | 21.08% |
| 1990 | 594.869 | 2675.200 | 22.24% |
| 1991 | 662.466 | 3037.950 | 21.81% |
| 1992 | 680.534 | 3327.415 | 20.45% |
| 1993 | 733.931 | 3702.675 | 19.82% |
| 1994 | 775.934 | 3911.560 | 19.84% |
| 1995 | 854.539 | 4593.560 | 18.60% |
| | | | |

<u>Table 9</u>

<u>Insurance Company Share of the Private Retirement Market</u>
(\$ Billions)

| | Ins. Pension Reserves | Total Assets | Ins. Co. Share |
|------|-----------------------|---------------------|----------------|
| 1983 | 269.425 | 1184.725 | 22.74% |
| 1984 | 313.215 | 1327.515 | 23.59% |
| 1985 | 373.475 | 1694.075 | 22.05% |
| 1986 | 441.390 | 1850.99 | 23.85% |
| 1987 | 495.420 | 1987.52 | 24.93% |
| 1988 | 562.155 | 2174.255 | 25.86% |
| 1989 | 624.290 | 2545.19 | 24.53% |
| 1990 | 695.700 | 2675.2 | 26.01% |
| 1991 | 745.950 | 3037.95 | 24.55% |
| 1992 | 768.215 | 3327.415 | 23.09% |
| 1993 | 825.375 | 3702.675 | 22.29% |
| 1994 | 878.460 | 3911.56 | 22.46% |
| 1995 | 972.560 | 4593.56 | 21.17% |

<u>Table 10</u>

<u>Premium Income of Life Insurance Companies</u>
(\$ Billions)

| | Life Ins. | Annuities | Health Ins. | <u>Total</u> | <u>Life</u> | Annuity | <u>Health</u> |
|-------|-----------|------------------|-------------|--------------|-------------|----------------|---------------|
| 1983 | 50.265 | 30.544 | 38.201 | 119.010 | 42.24% | 25.67% | 32.10% |
| 1984 | 51.274 | 42.859 | 40.671 | 134.804 | 38.04% | 31.79% | 30.17% |
| 1985 | 60.127 | 53.899 | 41.837 | 155.863 | 38.58% | 34.58% | 26.84% |
| 1986* | 66.213 | 83.712 | 44.153 | 194.078 | 34.12% | 43.13% | 22.75% |
| 1987 | 76.737 | 88.677 | 47.549 | 212.963 | 36.03% | 41.64% | 22.33% |
| 1988 | 73.531 | 103.278 | 52.306 | 229.115 | 32.09% | 45.08% | 22.83% |
| 1989 | 73.290 | 114.997 | 56.079 | 244.366 | 29.99% | 47.06% | 22.95% |
| 1990 | 76.692 | 129.064 | 58.254 | 264.010 | 29.05% | 48.89% | 22.07% |
| 1991 | 79.301 | 123.590 | 60.900 | 263.791 | 30.06% | 46.85% | 23.09% |
| 1992 | 83.868 | 132.645 | 65.545 | 282.058 | 29.73% | 47.03% | 23.24% |
| 1993 | 94.448 | 156.445 | 68.658 | 319.551 | 29.56% | 48.96% | 21.49% |
| 1994 | 96.271 | 153.850 | 76.221 | 326.342 | 29.50% | 47.14% | 23.36% |
| 1995 | 98.925 | 159.935 | 80.352 | 339.212 | 29.16% | 47.15% | 23.69% |

Table 11

IRA Share of Insurance Co. Pension Assets
(\$ Billions)

| | Ins. IRA | Pension Reserves | IRA Share |
|------|----------|------------------|-----------|
| 1983 | 8.995 | 269.425 | 3.34% |
| 1984 | 12.550 | 313.215 | 4.01% |
| 1985 | 16.955 | 373.475 | 4.54% |
| 1986 | 22.650 | 441.390 | 5.13% |
| 1987 | 30.085 | 495.420 | 6.07% |
| 1988 | 38.850 | 562.155 | 6.91% |
| 1989 | 37.855 | 624.290 | 6.06% |
| 1990 | 41.975 | 695.700 | 6.03% |
| 1991 | 49.690 | 745.950 | 6.66% |
| 1992 | 55.600 | 768.215 | 7.24% |
| 1993 | 69.465 | 825.375 | 8.42% |
| 1994 | 78.735 | 878.460 | 8.96% |
| 1995 | 94.295 | 972.560 | 9.70% |