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process so you can systematically generate new product ideas.

It is also always important to have several ideas “in the bullpen.” You never know when yesterday’s crazy idea may become tomorrow’s wildly successful product.

By systematically managing the idea generation process, you will never be without ideas—and it is almost guaranteed that you and your company will benefit dramatically.

Mark A. Milton, FSA, is Vice President and Associate Actuary at Kansas City Life Insurance Company in Kansas City, Missouri, and Chairperson of the Individual Life Insurance and Annuity Product Development Section.

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would like to accomplish the disclosure portion as soon as possible so companies can start implementing it. The illustrations standards, which would include a “supportability” component, would be defined later. The industry will make another proposal on the disclosure draft at the September NAIC meeting. Julie Spezio is the ACLI contact.

A. Micheal McMahon, FSA, is Second Vice President and Actuary at The Principal Financial Group in Des Moines, Iowa, and a member of the Individual Life Insurance and Annuity Product Development Section Council.

Life Insurance Firms in the Retirement Market: Is the News All Bad?

by Paul Hoffman  
and Anthony M. Santomero, Ph.D.


ABSTRACT

The role of the life insurance industry in the retirement assets market is examined. General trends found include: the massive increase in total retirement assets, both in absolute levels and relative to total wealth; the decline in corporate pensions including a shift from defined-benefit plans to defined-contribution plans, driven by increasing investment in 401(k)s; the rise in total IRA assets; and the relative decline of insurance annuities. These trends, and the increasing dependence of insurance companies on annuity premium income, presage a difficult competitive future for life insurance companies in the retirement market.

The Popular Image: The Dying Insurance Dragon

The popular view of the role of insurance companies in the private retirement market is that of a dominant player that is rapidly fading in prominence. Mutual funds are rightfully perceived as having attracted both the general investor and those who are planning for retirement. Banks are also seen as a threat, though to a much lesser degree. Bank entry into the insurance market is much feared but, thus far, greatly exaggerated. While clearly a new competitor, the bank threat is merely one more piece of bad news—one more combatant in the war for retirement assets.

In this article, the authors take an objective look at where insurance companies and their products fit in the retirement asset market. The article surveys the literature and available data on the products that make up this growing segment of the financial landscape in order to help professionals both understand the trends and identify opportunities.

The news is not all disheartening. The industry is clearly a central part of the burgeoning retirement asset market with a major share of the assets accumulated so far. Its position over the last several years has been exaggerated and/or misrepresented by snippets of data that have led to an incomplete picture of the retirement asset market and the insurance industry’s role within it.

Specifically, a broad overview of the private retirement asset market suggests that:

1. The market itself is growing rapidly as baby-boomers appear to be saving more rapidly than the preceding generation.
2. The retirement products used by this new generation have shifted substantially over the past decade, such that:
   a. pensions are not growing as quickly as other forms of retirement assets
   b. defined-benefit plans are declining both as a percentage of wealth and as a percentage of retirement assets
   c. corporate pensions are declining in favor of individual retirement assets
   d. annuities, offered by insurance firms, have grown in importance relative to wealth and have remained stable as a percentage of retirement assets.
3. 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.

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Life Insurance Firms

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This market overview suggests certain requirements for the future growth and profitability of insurance firms in the retirement market. The challenges are:

a. maintaining dominance of the annuity market
b. recognizing that the defined-benefit and defined-contribution pension categories are aged markets, subject to relative, if not absolute, decline
c. competing effectively in the 401(k) and IRA segments of the retirement arena.

Make no mistake about it; however, the retirement market as a whole is growing and as such is an extraordinarily attractive segment of the financial market. By year-end 1996, private retirement assets were nearly $5.1 trillion.[1] Retirement assets have increased their proportion of wealth from 10.6 percent in 1983 to 13.6 percent at year-end 1996 (see Table 1). It is therefore possible, given the scenario of an increasing market, for an industry segment to lose market share and yet increase sales and profits. Since 1990, this has been the case for insurance firms. Prior to 1990, the insurance industry market share was increasing. Subsequently, however, its share has dramatically shifted as consumers changed the asset categories selected.

Life insurance companies were never able to achieve a significant market share in the fastest growing retirement asset markets such as 401(k)s and IRAs. This lost share can and should be viewed as a lost opportunity. Offsetting this loss is the industry’s annuity market dominance. It has been projected, based upon historical trends and economic forecasts, that the market for individual annuities is expected to increase annually at an 8 percent rate.[2] Therefore, it is wise to take some of the dire predictions with a grain of salt.

Many data services and consulting firms track the retirement asset market, and their data are often the source of predictions of a collapse of the insurance industry’s market share. In the past, headlines such as “Insurers Lose Ground to Competitors in IRA Market,” “Insurers Losing the Retirement Asset Battle,” or, to take a specific example, “Insurers Lose 401(k) Market Share to Mutual Funds,”[3] have been commonplace. The last of these articles was based upon data reporting that the insurance company’s share of the 401(k) market slipped from 34 percent to 30 percent in the two-year period from 1992 to 1994. Mutual funds were declared victorious because they were able to increase their share from 26 percent to 37 percent.

Industry pundits do make some important points. For example, well-known publications such as Best’s Review [4] cite fundamental weaknesses that impair insurance companies from competing effectively in the retirement asset market. Life insurance products have been contrasted with those offered by mutual funds and are frequently found wanting. Some of the citations are well worth repeating.

Most insurance companies offer a limited selection of investment choices. If they do offer mutual funds, they tend to be conservatively managed, not unlike the pattern exhibited with their general funds. This has lead to relatively poor investment results or, at least, significantly less appreciation than averages achieved elsewhere during the recent stock market boom. Returns from insurance products are often further diminished by front- or back-end fees, or deferred sales charges that are generally higher than those of competitors. In aggregate, these factors predispose poor performance and will lead the public to move to other better-performing institutions.

The traditional stronghold of life insurers, the annuity market, is not immune to gloomy reports and projections. In thriving areas such as variable annuities, direct insurance company sales are slipping. The Variable Annuity Research and Data Service [5] reports that direct sales of variable annuities decreased to 43 percent in 1995 and are projected to further decline to 30 percent by the year 2000. Banks are identified as the primary culprit in this sales decline. The insurance industry can passively watch further erosion in this market, or it can fight to keep the second largest segment of the market.

Through all of these assessments, the reader is cautioned to keep one caveat in mind: Data in the retirement market can be misleading and at times extremely opaque. Some segments of the financial sector do not clearly report assets held for retirement in such vehicles as 401(k) or IRA accounts. Others do not indicate the purpose for which purchases are earmarked. For example, annuity figures are most certainly higher than are reported. Many annuities do not qualify for tax advantaged status, and therefore, are not reported as being

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Life Insurance Firms
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retirement assets. A further example is contained in the Pension and Welfare Benefits Administration’s report on defined-benefit and defined-contribution plans; a total of $128.5 billion is reported as being held in insurance company general accounts. A significant portion of this is most certainly earmarked for annuities. [6]

Nonetheless, extrapolating from available data, with all its pitfalls, the bottom line is that the insurance industry’s portion of the retirement asset market is huge. Life insurance company assets and reserves of annuities alone have increased from $172.0 billion in 1980 to $1.315 trillion in 1996 [7] (these totals include nontax-advantaged annuities as is the practice of the Federal Reserve). These figures represented 2.06 percent of 1980 wealth and 3.52 percent of 1996 wealth, respectively, and reveal a relatively healthy insurance industry sector.

The Contest: The Retirement Asset Market

Any discussion of the competitive position of insurers in the retirement asset market must begin with an understanding of the market itself and its trends. The retirement asset market consists of multi-year assets established to facilitate the accumulation of wealth in anticipation of decumulation upon retirement. Such assets are usually tax advantaged, with the tax liability of either principal and interest (or both) deferred until withdrawal. Because of this feature, the category itself is imprecise, as some may attempt to save for retirement beyond tax-advantaged products while others may use the products’ tax-advantaged status for multi-year nonretirement savings. It is for this reason that the numbers produced by different reporting entities are often at odds; such data problems represent a substantial challenge to any useful analysis of the market.

At its heart, however, the retirement asset market involves multi-year horizon investment plans by whole generations of households. For these individuals, saving for an event that will occur on the distant horizon requires discipline and foresight. Both attributes have been examined in the popular and academic spheres.

It is commonly thought that the quantity of saving for retirement by the current U.S. population is inadequate to ensure acceptable living standards at retirement. A n Organization for Economic Cooperation and Development (OECD) comparison of savings rates in Canada, France, and Great Britain reveals that the United States has the lowest savings rate and the highest percentage of its population entering the retirement portion of their life cycle. [8] While providing a relative picture, this ranking begs the questions of what is adequate and whether U.S. retirement asset accumulation is sufficient in light of this generation’s expectations and existing government social programs.

A major hindrance to past research has been the lack of adequate data. The situation has improved with the advent of the Health and Retirement Survey (HRS). Beginning in 1995, commentators have shifted their views about wealth adequacy based upon the data provided in the HRS, which offers evidence that wealth is being accumulated at a faster pace than has been commonly thought. [9] Other researchers [10] have since contributed further evidence to the 1993 study by the Congressional Budget Office that used cohort data in demonstrating that baby boomers are saving at a faster rate than their parents did. [11]

This research is hopeful for the retirement asset market, but one should remember that in all studies there is the problem of defining and measuring wealth. The authors of this article employ a relatively simple definition using only standard financial assets including equity, debt, cash, and short-term instruments. Other analysts have a much more extensive definition of individual wealth, which includes such items as housing equity and retirement wealth inclusive of Social Security, minus outstanding debt. [12] They have determined that households on the verge of retirement have average total assets of $499,187 and median total assets of $339,725. [13] These numbers are reduced significantly—to $163,087 and $59,335 respectively—using the definition employed in this article. The difference in the mean and median statistics in both these measures reflects the upward skew imparted by the holdings of the wealthy.

Determining whether these resources are adequate for acceptable post-retirement living standards is a difficult task and is investigated using many different methods. However, in every case, the problem is compounded by the differing percentage in post-retirement income needs demonstrated by different income levels. [14] The poor definitely need a higher fraction of preretirement earnings, known here as the replacement rate. Generally, whatever examination tool is used, the conclusion reached is that the current level of aggregate savings is inadequate for a clear majority of the general public. In addition, future changes to the Social Security system, which put the onus on individual responsibility, will deepen the need for increased saving. [15]

There is extensive literature on governmental measures to remedy this situation and their efficacy in stimulating saving. [16] Despite a great deal of contention, the general view is that tax advantaged programs can induce greater saving but not nearly at the proportions desired. One pair of analysts suggests that retirement accounts that are rolled over should require that a minimum percentage be maintained. [17] This would decrease retirement asset slippage and may in fact be more effective than new tax-advantaged vehicles, though aggregate saving would not substantially increase.

The previously stated notwithstanding, the new evidence on accelerating savings accumulation is hopeful. This is true from a public policy point of view, as it reduces concern for the numerous aging baby boomers and implies substantial growth for those portions of the financial sector offering retirement asset products. While evidence suggests that not all financial products have experienced proportional growth, this broad category of financial assets has been flourishing and is likely to continue to do so.

The Products: Instruments of the Retirement Market

Not long ago, a listing of retirement assets would have been quite short. Pensions offered by large firms made up the bulk of nongovernment retirement assets, with most individuals using...
standard depository institution deposits or retail mutual funds as additional assets earmarked for retirement. However, the last half century has seen the development of a number of tax-advantaged, retirement-specific asset categories, which now make up the bulk of retirement savings. To begin the discussion of the relative share of these asset categories, each is reviewed as follows.

**Defined-Benefit Plans**

Defined-benefit plans are provided by employers to their employees and promise to pay a specified benefit upon vesting and subsequent retirement. Benefit payments generally continue until the death of one or more of the covered persons, and as such, these plans are a standard insurance product. To finance the liability, employer contributions are determined actuarially. Funding by the employer is tax deductible, as long as it is a qualified plan according to IRS regulations. Once instituted, employer funding is inflexible; that is, proper levels must be maintained, and the employees have certain legal rights to coverage. Employer contributions are pooled and can vary over time depending upon the investment performance of the pooled assets. However, regardless of investment performance, the employer is legally liable for benefit payouts. Therefore the firm is the full bearer of risk.

From the point of view of the individual worker, this type of plan eases the difficulty of retirement planning. Benefits are easily and accurately determined. However, for the employer, the combination of the actuarial mortality risk, the vagaries of financial performance, and high administration costs have made these programs increasingly burdensome. These factors have figured prominently in the movement toward defined-contribution plans.

Under the defined-benefit label, there are a number of different benefit plans with varying methods of payout. A worker may accrue units—which are tied to his or her compensation—or fixed dollar amounts. Other types of benefits may be tied to career average salary, or some variation thereof, and/or linked to years of service. Payouts are generally in the form of an annuity.

**Defined- Contribution Plans**

Defined-contribution plans are employer-sponsored plans that do not promise a fixed benefit, but rather have benefits related to contributions and asset performance. There are a wide variety of plans of this type. If contributions are within specified limits, they are considered tax-sheltered and are therefore deductible by both employee and employer. Generally, these plans are structured so that the firm contributes a certain sum or salary percentage per covered worker; thereafter, the employer has no additional rights or responsibilities associated with these dedicated assets. Contributions tend to be related to salary but do not ordinarily recognize past service.

Employers favor defined contribution plans because they are not generally liable for asset performance, and administration is less costly and complex. These are the same reasons why employees may find these plans less attractive than defined-benefit plans. Determining expected asset levels at retirement is complex, and administration time and cost is non-trivial to the employee.

With defined-contribution plans, employees can determine—indeed they are responsible for—asset selection, risk-return trade-offs, and their own retirement planning. On a positive note, the compounding of interest and/or dividends can lead to large sums at retirement, but generally require long accumulation periods. Poor asset performance, however, can lead to inadequate retirement funds, a fact that may be lost on a generation that has never seen a bear market.

The types of defined-contribution plans are quite varied; planners should consult a dedicated pensions text for full and detailed information. [18] A sampling of the form that defined-contribution plans can take includes the following:

- Profit-Sharing Plans whereby employer payments are tied to corporate profits (within limits). In such cases, there must be a definite allocation plan, and payouts are tied to account balances.
- Employee Stock Purchase Plans where shares of the employer are purchased, often with the employer matching a portion of the purchase price. In many cases, other equities may be purchased, but at least 50 percent must be in employer stock.
- Thrift Plans in which the employee contributes a fixed percentage of his or her salary. There may be some degree of employer matching. The employee is often offered a choice as to how funds are invested. Funds are segregated into separate accounts, and interest and dividends are reinvested.
- 401(k) Plans in which payments are tied to firm profits. This is the newest and fastest growing portion of this category. In reality, it is a variation of profit-sharing plans.

"... the last half century has seen the development of a number of tax-advantaged, retirement-specific asset categories, which now make up the bulk of retirement savings."

Contributions are considered to be salary reductions and may be matched by the employer. Assets accumulate tax free until withdrawal.

- 403(b) Plans are the counterpart of 401(k) plans for nonprofit organizations. While not properly described as a profit sharing plan, salary reduction and employer contributions mirror their private sector counterparts. In fact, for data purposes, these are often aggregated into the private sector 401(k) totals.

**Individual Retirement Accounts**

Beyond employer-sponsored retirement plans, individuals have access to tax-favored investment through individual retirement accounts, known as IRAs. Once extremely popular, they have fallen out of favor since the tightening of the tax code in 1986. Contributions are deducted from earned income and...

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can be up to $2,000 (or total compensation, whichever is lower) for individuals and $4,000 for married couples.

However, if the employee participates in another qualified plan, the limit declines to zero in the $25,000 to $35,000 income band. Beyond this income level, contributions are no longer tax deductible. [19] An employer may contribute funds, but these are considered to be compensation and are taxed as standard earned income in the year in which it is paid. However, tax on all interest and dividends is deferred until withdrawal.

Funds are transferable to other providers of IRA services, but withdrawals are restricted. Assets can be invested in a wide range of investment choices including fixed-term savings accounts, certificates of deposit, annuities, mutual funds, and self-directed brokerage accounts. As is the case with all defined-contribution programs, however, the effects of these investment decisions accrue to the program recipient for better or worse.

Recently, IRA accounts have also been used for at least two other purposes. If an employee receives a lump sum transfer from a defined contribution plan, associated with early termination or an early withdrawal from the tax-sheltered plan, the employee may establish an IRA with the transferred assets and maintain their favorable tax status.

The second area that has seen recent growth is the use of simplified employee pension plans or SEPs. This program is aimed at small employers with less than 25 employees (there has been discussion about increasing this number).

Administrative paperwork is kept to a minimum by the adoption of one of two model plan documents. Contributions are essentially salary reductions and are tax deductible by both employee and employer. This retirement class has been termed “super IRAs” because of their much higher limits. The employer may contribute 15 percent of annual compensation or $30,000, whichever is less. The employee may contribute up to $7,000 annually. SEP creation requires a SEP-linked IRA account into which funds are transferred in standard defined-contribution fashion. Thus, the IRA market has experienced some of its growth because of its ability to participate in the rapid expansion of the defined-contribution market discussed previously.

**Annuities**

This investment type is singled out because of the sheer size of its investment market. Generally speaking, an annuity can be many things. Annuities can be both a method of payout and an investment vehicle in itself. Annuities may begin paying benefits immediately, or payments can be deferred to some future date as, for example, expected retirement. Annuities may be purchased by a single lump sum payment, or through a series of payments over a number of years.

There are also different types of annuities depending upon contract terms over the accumulation phase. In some cases, the annuity declares a return each period based upon market performance. In other cases, the return is specified for a predetermined period of months or years. Guaranteed Investment Contracts (GICs) offer a guaranteed interest rate for a specified period. With a multiple guarantee contract, multiple payments are made, each with its own interest rate. This market is large, but has been waning in recent years.

Variable annuities are growing in popularity. In these products, accretion of funds may be tied to an index such as insurance company general fund returns, the Consumer Price Index, or some other index. It may also be directly related to the performance of the segregated assets invested on behalf of the annuity. The holder is often given latitude as to how funds are invested and granted permission to transfer funds to other sectors of the financial market.

The variation in the types of annuities makes it difficult to talk about the market in simple terms. However, its flexibility is one of its major benefits. Annuity contracts can be structured for pre- or post-tax dollars, fixed or variable terms, and fixed or variable returns. In all cases, however, these contracts include tax advantages for interest and dividends and actuarial risk of some type. The latter has developed into both an attribute and Achilles’ heel, discussed as follows.

**Recent Trends: The Dynamics of the Product Markets**

The retirement asset market is experiencing rapid change. On an aggregate level, retirement assets have been growing more rapidly than either overall economic activity or aggregate financial wealth. However, the real story is the changing shares within the market. To best understand these changes, it is helpful to first review the dynamics of individual product markets, and then consider institutional market shares. Given the nature of the data available, the breakdowns between the two are somewhat different, but are nevertheless highly descriptive.

**Pension Assets**

As noted previously, 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-benefit (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 to contribute with the corporation matching these 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.

Over the period from 1980 to 1993, [20] the combined assets of both DB and DC plans grew from $563.6 billion to $2.3 trillion (see Table 2). Insurance company totals, which are usually reported separately, increase the total to $3.1 trillion. With inflation and wealth increasing over this period, these figures do not convey much more than that the retirement market has grown precipitously. The combined market benchmarked against total wealth has fluctuated in the 10.62 to 13.62 percent range over the period 1983 to 1996. The general trend has been upward, with the single exception of the period 1985 to 1988.

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However, the decidedly upward drift conceals a dynamic shift in the makeup of this sector. As Table 3 illustrates, the market has demonstrated a strong shift away from the defined-benefit plans toward defined contribution plans. In 1980, the defined-benefit assets were 2.5 times that of defined-contribution assets. By 1993, the last date available, defined-benefit assets were only 1.17 times that of defined-contribution plans. The trends indicate that it is likely the two plans are now nearly at parity.

The rise of individual saving for retirement, through such vehicles as 401(k) accounts, further alters the analysis. Gross defined-contribution figures include 401(k) balances in the totals. Deducting 401(k) assets yields the data reported in Table 4, which reveals that the percentage of wealth represented by other defined-contribution plans has declined slightly over the period. More importantly, it is apparent that the total employer-related portion of the retirement assets market is declining. Defined-benefit programs have been declining precipitously from 5.41 percent to 4.41 percent of total wealth over the reported decade, as DC plans have drifted only slightly lower.

Additional evidence illustrates that DC programs have substantially replaced DB plans within the corporate pension fund market over this period. [21] This is true even while their total is declining as a percentage of wealth. This result is hidden by the dramatic increase in 401(k) assets, but is evident in Table 4.

401(k) Accounts

Legislative action led to the creation of 401(k) accounts in 1978. However, this retirement program did not become popular as a savings vehicle until its operation was clearly defined by the Treasury Department in 1981. At that time, the requirements of the market were set forth. As noted previously the availability of 401(k) accounts is dependent upon employer sponsorship, but it is essentially an individual's account. Because the employer may match a portion of the employee's contribution, 401(k)s are listed as defined-contribution plans. However, the employee's choice of contribution level and the method of fund investment have led many to consider 401(k)s as being individual accounts.

Contributions to 401(k) accounts affected by the Tax began at modest levels in comparison to both DB plans and IRAs. Contributions in 1984 were $16.29 billion but nearly doubled in the next two years. However, unlike IRAs, 401(k)s were not materially

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**TABLE 2**

Assets of Private Pension Plans (Excluding Insurance Companies) ($ Billions)

**TABLE 3**

Defined-Benefit and Defined-Contribution Assets as a Percentage of Wealth

The charts for this article are not available on line.
Please contact Susan Martz at smartz@soa.org or (847) 706–3543 for a hard copy.
Reform Act of 1986. Therefore, contributions continued to increase each year over the last decade. Annual contributions in 1993 were $69.3 billion, well beyond the peak levels of IRA contributions (see Table 5).

Total 401(k) assets continue to rise both absolutely and relatively. The period from 1984 to 1993 saw total assets increase from $91.8 billion to $616.3 billion. These gross dollar amounts correspond to 0.74 percent and 2.18 percent of total wealth respectively. The current value of outstanding 401(k) assets is lower than its IRA counterpart and can be attributed to a smaller time frame for contributions (see Table 6).

Individual Retirement Accounts

Many view individual retirement accounts as beginning with the Tax Act of 1981. However, IRA contributions were $1.4 billion as early as 1975. In 1981, however, IRA saving became tax advantaged, thereby becoming particularly attractive. At this point, contributions rose from $4.8 billion in 1981 to $28.3 billion in 1982. Contributions increased rapidly until their peak of $38.2 billion in 1985. Subsequently, the Tax Reform Act of 1986 changed the code once again, this time to the IRA’s disadvantage. Savers responded by reducing contributions to levels only slightly higher than those prior to 1981. Table 5 illustrates the sensitivity of IRA annual contributions to the tax code changes; annual contributions declined immediately following the 1986 legislation.

The importance of individual retirement accounts is perhaps better seen by looking at total assets. In 1983, total IRA assets were $91.3 billion. By year-end 1996, total assets had expanded to $1.35 trillion. Table 6 shows that the 1984 figure represents 1.06 percent of wealth, and the 1993 total represents 3.07 percent of wealth. Thus, despite flat contributions since 1987, total assets have dramatically increased. To be sure, much of the growth is a result of the gains in the equity market over this period, but it nevertheless represents a large and vibrant asset pool.

The combination of large outstanding balances, transfers from other retirement asset accounts, and the rise of SEP programs (which comprised 5 percent of 1995 IRA assets invested in mutual funds) make this an attractive market. As such, competition for the $1.3 trillion aggregate total is fierce. Within this category, rollovers and small business SEP programs are a more important active battleground than are new IRA accounts. However, the lack of data does not permit a detailed analysis.

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The Annuities Market

Group annuities come in many shapes and sizes, but are usually purchased by employers on behalf of their employees. Group and individual annuities can be components of either defined-benefit or defined-contribution plans. Variable annuities differ in that their funds are usually invested in equity. They are sometimes classified as defined-contribution and can also be either group or individual.

By any measure, the annuity market has grown increasingly active in recent years. Sales of group and individual annuities (including taxable) were $19.45 billion and $15.20 billion respectively in 1982. By 1996, these figures had risen to $92.23 million and $84.07 billion. However, the figures disguise the fact that group annuity contributions have traditionally been greater than those of individual annuities. In 1986, they were more than double. The differential peaked during the period 1986 to 1990 (see Table 7).

On the other hand, contributions to individual annuities rose steadily through 1995. By 1994, individual annuity contributions had overtaken group contributions, with a slight backing off in 1995 and 1996. A similar pattern of growth is shown in Table 8, where annuity premiums are scaled by total wealth. Growth is obvious, with the largest relative gains over the last decade accruing to the individual annuity market.

Shifting from premium income to numbers of contracts, Tables 9 and 10 show the growth in the number of people holding fixed and variable annuities. Noticing the differential scale, it is obvious that the fixed annuity market still dominates, but the recent dramatic growth of both individual and group annuities is startling. In fact, recently reported data suggests that there are over 47 million annuity contracts in force. [23]

Turning to assets held in connection with the annuities in force, Table 11 reports on assets and reserves of annuity contracts and shows a similar dynamic. Assets and reserves in 1980 were $140.42 billion and $31.54 billion for group and individual annuities respectively, while the 1996 totals were $657.06 billion and $658.35 billion (these totals include non-tax-advantaged annuities). Normalized as a percentage of wealth, the 1980 figures were 1.68 percent and 0.38 percent respectively. These figures rose steadily to 1.76 percent in 1996. Group annuity assets and reserves peaked in 1990 at 2.32 percent. On the other hand, individual annuities steadily increased to their current levels by year-end 1996 (the data from 1996 is not directly comparable to previous years due to accounting change).
spectacular in the variable annuity sector. Several factors account for this recent growth:

1. The relative decline in defined-benefit plans
2. The increased interest by the more affluent and educated baby boomer cohorts
3. The increased acceptance of equity investment for asset accumulation.

This latter point may be particularly relevant. Returns on variable annuities devoted to equity investment tend to be higher than traditional annuities because of their similarity (in spirit, if not in fact) to equity mutual funds. While the rate of inflow of funds to mutual funds has been quite rapid for over a decade, the rise in variable annuities has been even more so. Contributions increased fourfold since 1991, rising from $17.3 billion in 1991 to $73.8 billion in 1996.

The shift to variable annuities is further demonstrated by viewing their increased share of annual premium income. In 1983 only 9.85 percent of premiums were for variable annuities; by 1996 the share had risen to 31.54 percent. While this total is still substantially below the fixed annuity counterpart, the relative growth is noteworthy (see Table 12).

### Market Shares: The Changing Fortunes in Retirement Products

With the changing nature of the retirement market, it is obvious that the product mix is dramatically changing. Defined-benefit plans are giving way to defined-contribution plans, 401(k)s, IRAs, and annuities. The battlefield of future competition is going to be in these four product areas, as the defined-benefit market is aged and in decline. This fact has several implications for the astute observer.

First, institutions that have a large portion of the defined-benefit market will inevitably lose their relative position in the broader retirement asset market. This means that insurance firms and bank trust departments, which traditionally have been strong in this market, will find it virtually impossible to maintain their relative position.

Second, the changing product mix implies that the future growth of these firms will depend upon their ability to garner market share in the four growth areas enumerated previously. Furthermore, with the move toward individual pension planning, the real contest will center on the control of the retail market. In short, the future depends upon maintaining, acquiring, and/or growing assets in the IRA, 401(k), and annuity product areas. Three products are discussed in greater detail as follows.

### Individual Retirement Accounts

During the period from 1984 to 1993, IRA assets rose impressively from 9.93

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**TABLE 8**

<table>
<thead>
<tr>
<th>Annuity Premiums as a Percentage of Total Wealth</th>
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</thead>
</table>

The charts for this article are not available on line. Please contact Susan Martz at smartz@soa.org or (847) 706-3543 for a hard copy.

**TABLE 9**

<table>
<thead>
<tr>
<th>Number of Fixed-Individual Annuities (Millions)</th>
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Life Insurance Firms  
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percent to 23.41 percent of total pension assets (see Table 13). As mentioned previously, this increase is in spite of the fact that direct IRA contributions have fallen considerably since their peak in 1985. The increase in total assets can be attributed to appreciation in asset value, lump-sum rollovers, and the expanded use of IRA accounts in the nascent SEP market.

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 insurance companies. Table 14 demonstrates the dramatic changes in relative share experienced by these institutions between 1985 and 1996. Mutual funds and brokerages have made sizeable inroads into depository institutions' share. Depository institutional share declined from 61 percent in 1985 to 18.4 percent in 1996. Mutual funds and brokerages picked up 43.2 percent of this drop, with mutual funds increasing from 15.8 percent to 37.9 percent and brokerages from 14.7 percent to 35.8 percent. Part of this change is explained by the appreciation of equities. At the same time, insurance companies exhibited a pronounced decline from a 10.4 percent market share in 1990 to 7.8 percent in 1996.

With contributions at a low point, competition for lump-sum rollovers will likely heat up in coming years. The Employee Benefit Research Institute looked at the IRA contributions market during the period from 1987 to 1990. [24] During this period, for every newly initiated rollover account, contributions continued in 3.85 existing accounts. The pattern is reversed however, when considering dollar amounts. A typical rollover account has an annual contribution 3.21 times that of a regular account. Of course this figure is statistically misleading since it incorporates the large initial amount that is rolled over. Both the number of accounts and the dollar amounts were moving 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. IRA rollovers, which are invested in the mutual fund market, show a similar trend. The share of rollover assets increased from 27.39 percent to 34.17 percent of total IRA assets over the period extending from 1992 to 1994. [25]

As previously noted, IRA contribution rates are sensitive to changes in the tax code. At present, the majority of fee income is derived from management of the existing huge asset pool. Changes in relative institutional share will likely be dependent upon making inroads into the rollover market and the new SEP-IRA and Roth IRA markets. However, the data suggests that

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depositories are clearly losing share to mutual fund complexes and brokerage firms. Insurance firms can only gain IRA market share 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 across the board.

401(k) Accounts
Currently, this segment of the retirement market is slightly over 70 percent of the size of IRA balances. As of year-end 1993, the most recent date available, total assets were $616.3 billion. With the downturn in IRA contributions, 401(k) accounts have rapidly taken up the slack. As noted before, annual contributions rose uninterrupted from 1984 to 1993. 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 6.91 percent of total retirement assets. By 1993, their share had risen to 16.63 percent (see Table 13 [using Department of Labor figures]).

Data on the institutional makeup of the 401(k) market is sparse. The mutual fund industry is the only industry that regularly reports its market share. During the period from 1986 to 1995, mutual funds saw their 401(k) share rise from 8.39 percent to 38.67 percent (see Table 15). 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 in-roads. However, success of the insurance industry depends upon its ability to offer products that permit equity participation and to offer a wide range of investment options. Depository institutions have been losing 401(k) market share because they have not offered their customers a wide range of choices. 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 19.81 percent of the market (IRAs were first with 23.41 percent and 401(k)s followed with 16.63 percent) (see Table 13). As would be expected, insurance companies are dominant in this area. Their share of the distribution market for annuities in 1993 was 75.91 percent. In raw dollar amounts, annuity reserves totaled $1.041 trillion, of which $733.93 billion was classified by insurance companies as being retirement targeted. It must be kept in mind that

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these figures understate retirement annuity totals. Many individuals make purchases of annuities that do not qualify for tax deferred status.

Nonetheless, Table 16 reveals that the share of total retirement assets for tax deferred insurance company annuities has declined over the current decade. Their market share slipped from 20.38 percent in 1983 to 16.61 percent in 1996, having peaked in 1990 at 22.56 percent. The picture is somewhat better when following the Federal Reserve’s practice of including nontax-advantaged annuities. Insurance annuities would then start with a market share of 24.17 percent in 1983, rise to 30.26 percent in 1990, and decline to 25.89 percent in 1996. Using these totals, annuities displace IRAs as the largest retirement asset instruments.

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 insurance companies is that their share of initial sales fees may be declining. Their share of revenue in the increasingly popular area of variable annuities was 55 percent in 1994 and decreased to 43 percent in 1995. Some commentators project the share will drop to 30 percent by the year 2000. [26] 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. [27]

Looking Ahead: The Future of the Insurance Industry

At $5.1 trillion in assets and reserves, the private retirement market is massive. It is growing both absolutely and relatively. Millions of workers are dependent upon it for their livelihood. Millions more are dependent upon it for their future. Much has been written about the eroding competitiveness of insurance companies in the retirement asset market. While not as severe as portrayed in the popular press, it is undeniable that their share has been decreasing. Overall, from 1983 to 1996, insurance company share slipped from 22.74 percent to 18.03 percent (see Table 17). This long-term trend accelerated between 1990 and 1996, with a decline of 8.35 percent from their 1990 peak. Insurance companies should be troubled by this greater than one percent decline per year.

In their traditional stronghold of annuities, insurers remain preeminent, as demonstrated by the number of annuity holders in Table 18. Many investment firms and banks have proclaimed their intention to challenge the insurance industry in this area, but have yet to do so with much visible success. Of greater

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TABLE 14
Institutional Share of the IRA Market

The charts for this article are not available on line. Please contact Susan Martz at smartz@soa.org or (847) 706–3543 for a hard copy.

TABLE 15
Mutual Fund Share of 401(k) Assets

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In their traditional stronghold of annuities, insurers remain preeminent, as demonstrated by the number of annuity holders in Table 18. Many investment firms and banks have proclaimed their intention to challenge the insurance industry in this area, but have yet to do so with much visible success. Of greater

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own need to maintain effectiveness and cost efficiency in its delivery systems to remain competitive. In areas such as variable annuities, insurers are under increasing attack by mutual fund houses that wish to gain market share at the expense of an insurance industry that, at times, fails to take advantage of its market leadership.

The similarity of variable annuities to mutual funds has been a major reason for their success. But therein may lie the problem. Variable annuities tend to have higher fees than traditional mutual funds. 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 low risk portfolio choices. As consumers become more knowledgeable, these inhibitors may nullify the value of insurance attachments, and variable annuities may subsequently lose their 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 19). There has been a fundamental shift to a dependence on the retirement market. It is for this reason that insurance companies should be particularly wary of encroachment upon their annuity share.

As far as the industry's potential in other areas, the picture is decidedly mixed. Insurers slipped from their 10.8 percent IRA market share peak in 1990 to 7.8 percent at year-end 1996. However, at the same time, IRA assets' proportion of insurance company pension assets increased from 3.34 percent in 1983 to 12.04 percent in 1996 (see Table 20). Therefore, despite losing market share, IRAs have become increasingly important to insurance companies' earnings and asset growth. Insurers 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.

Finally, the explosion in the 401(k) market should be 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 method whereby insurance companies can win back market share from mutual funds. It is a market clearly too big to ignore, and a key competitive opportunity. It remains to be seen if the industry is up to the challenge.

Overall, insurance companies have slipped in their share of the retirement assets market over the last decade. Their niche and strength is annuities.

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**TABLE 16**

| Insurance Company Annuities—Share of the Private Retirement Market |

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**TABLE 17**

| Insurance Company Share of the Private Retirement Market |

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continued on page 19, column 1
This segment is growing in absolute terms but is losing share relative to 401(k)s, IRAs, and the retirement market in general. Insurance companies 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.

Opportunities may come via traditional routes such as the rollover market, or by creative avenues such as product innovation. If they are unsuccessful or choose to ignore these areas, insurance companies risk becoming minor players in the retirement 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. Insurance companies should ask themselves a fundamental question: Do they want to link their survival solely to the annuities market?

(I/R Code No. 4400.00/2750.07)

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

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END NOTES

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TABLE 20
IRA Share of Insurance Company Pension Assets

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13. id.


15. How to deal with inflation without Social Security’s COLAs is examined in Zvi Bodie, Pensions As Retirement Income, Work Paper No.


19. The income bands for deductible IRAs were raised in 1997. In addition, a new IRA Plus was created.

20. The U.S. Dept. of Labor calculates these figures from Form 5500 filings with the IRS. The process has not been automated and is therefore subject to a lengthy delay of approximately three years.


26. Variable Annuities, supra note 5.


28. Variable Annuities, supra note 5.

29. EBRI Databook, supra note 24.