THE TAXATION OF INCOME FLOWING THROUGH LIFE INSURANCE COMPANIES

Thomas Neubig and Eugene Steuerle
U.S. Treasury Department

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# TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Preface</td>
<td>i</td>
</tr>
<tr>
<td>I. A BRIEF DESCRIPTION OF LIFE INSURANCE PRODUCTS</td>
<td>2</td>
</tr>
<tr>
<td>A. Traditional Life Insurance Products</td>
<td>2</td>
</tr>
<tr>
<td>B. Variations of the Standard Products</td>
<td>10</td>
</tr>
<tr>
<td>II. THE CURRENT RULES GOVERNING THE TAXATION OF INCOME FROM LIFE</td>
<td>12</td>
</tr>
<tr>
<td>A. Taxation at the Individual Level</td>
<td>13</td>
</tr>
<tr>
<td>B. Taxation at the Company Level</td>
<td>16</td>
</tr>
<tr>
<td>III. MEASUREMENT OF TOTAL TAXABLE INCOME FROM LIFE INSURANCE PRODUCTS</td>
<td>26</td>
</tr>
<tr>
<td>A. Tax Preferred Products Offered by Life Insurance Companies</td>
<td>27</td>
</tr>
<tr>
<td>B. Investment Income Net of Services at the Individual Level</td>
<td>31</td>
</tr>
<tr>
<td>C. Separation of Income from Return of Capital</td>
<td>34</td>
</tr>
<tr>
<td>D. Tax Preferred Assets Held by Life Insurance Companies</td>
<td>37</td>
</tr>
<tr>
<td>E. Other Special Preferences for Life Insurance Companies</td>
<td>39</td>
</tr>
<tr>
<td>IV. ALLOCATION OF TAXABLE INCOME BETWEEN RECIPIENTS</td>
<td>40</td>
</tr>
<tr>
<td>A. Allocation of Investment Income Between Company and Policyholders</td>
<td>41</td>
</tr>
<tr>
<td>B. Attribution of Investment Income to Specific Policyholders</td>
<td>42</td>
</tr>
<tr>
<td>C. Mutual Versus Stock Owners</td>
<td>44</td>
</tr>
<tr>
<td>V. ATTRIBUTION OF TAXABLE INCOME BY TYPE OF ACTIVITIES</td>
<td>55</td>
</tr>
<tr>
<td>A. Investment Versus Underwriting Income</td>
<td>55</td>
</tr>
<tr>
<td>B. The Definition of &quot;Life Insurance&quot; and &quot;Life Insurance Companies&quot;</td>
<td>59</td>
</tr>
</tbody>
</table>
VI. THE TIMING OF TAXABLE INCOME RECEIPT.................. 61

A. The Reserve Method of Accounting for Life Insurance Companies.......................... 62

B. An Alternative Method of Computing "Tax Reserves" for Life Insurance Companies........ 70

BIBLIOGRAPHY............................................................... 74
This paper represents the second in a series devoted to the subject of the taxation of income flowing through financial institutions. The first paper (OTA Paper No. 52 - "The Taxation of Income Flowing Through Financial Institutions: General Framework and Summary of Tax Issues") developed a general framework of analysis and summarized the broad tax issues applying to all financial institutions. This paper applies that general framework to the case of income flowing through life insurance companies.

Pending legislation may outdate some of the specific legal provisions discussed in this paper, but the application of the general framework used here will still be appropriate for analyzing most issues surrounding the taxation of income flowing through life companies. The reader should be careful not to view issues of life insurance taxation in isolation from the issues discussed in other papers of the series.
THE TAXATION OF INCOME FLOWING THROUGH
LIFE INSURANCE COMPANIES*

The tax laws applying to income flowing through life
insurance companies are among the most complicated in the
Internal Revenue Code. This complexity arises in part because of
the complex product (insurance) with which they deal and in part
because of political compromises over the relative taxation of
various insurance providers. At the individual level, the
taxation of income from life insurance products has been modified
little in the last three decades, despite the changing nature of
the industry and the development of many non-traditional invest­
ment-oriented "insurance" products.

This paper provides a general analysis of the taxation
of income flowing through life insurance companies. The analysis
builds upon the general framework established in "The Taxation
of Income Flowing through Financial Institutions: General
Framework and Summary of Tax Issues." 1/ The first section
describes various types of life insurance products. A general
outline of the relevant tax rules is presented in the second
section. Readers who are familiar with the subject matter of
both of these sections may wish to skip directly to the
discussion of the tax issues starting in section III.

* We are indebted to Andrew Pike, David Garlock, Larry Dildine,
Seymour Fiekowsky, Hudson Milner, and Gordon Wilson for
helpful comments, to Gordon Wilson for computer programming
assistance, and to Eunice Taylor and Geraldine Huggins for
their assistance in the preparation of the manuscript.

1/ Thomas Neubig and Eugene Steuerle, "The Taxation of Income
Flowing Through Financial Institutions: General Framework and
Summary of Tax Issues," Office of Tax Analysis Paper No. 52,
Department of the Treasury, September 1983.
I. A BRIEF DESCRIPTION OF LIFE INSURANCE PRODUCTS

Individuals purchase life insurance both for investment and for other services. A life insurance company holds many assets for its customers and receives a rate of return on those investments which it can return to policyholders in a variety of ways. Besides investment, other services provided by a life insurance company are related primarily to the pooling of risks against various events such as mortality, disability or illness.

It is often difficult to separate funds devoted to meeting contingent liabilities (the insurance function) from those used to intermediate between savers and investors (the investment or intermediation function). Insurance products generally perform both functions. At a minimum there is always some lapse of time between when premiums are paid and when insurance proceeds are returned. During that period, premiums are invested in income-bearing financial assets, with the life insurance company serving in the additional role of intermediary between savers (policyholders) and investors.

A. Traditional Life Insurance Products

Term Life Insurance

The product most commonly associated with life insurance companies is term insurance. A one-year term insurance contract provides substantial risk-pooling services to the individual, but has only a minimal investment component. The premium charged for an annual term insurance contract is based on the expected death benefits for the insured and the company’s loading charges. Loading charges cover the cost of providing the service, including commissions to salesmen and returns to the owners of the company.

Table 1 illustrates the pricing of an annual term insurance contract for a 27 year old male. His expected probability of dying in a given year (the mortality rate) is 0.00199, or
Table 1

Pricing of an Annual Term Life Insurance Product*

<table>
<thead>
<tr>
<th>Expected Death Benefits</th>
<th>$199</th>
</tr>
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<tbody>
<tr>
<td>on a $100,000 Policy</td>
<td></td>
</tr>
<tr>
<td>for a 27 Year-old Male</td>
<td></td>
</tr>
<tr>
<td>Mortality rate = 0.00199</td>
<td></td>
</tr>
</tbody>
</table>

| Loading Charges          | + 60 |
| (Administrative expenses  |      |
| commissions, profit)     |      |

| Total Premium assuming no | $259 |
| investment               |      |

| Present Value of $10     | - 9  |
| Investment Income        |      |
| (10% discount rate)      |      |

| Total Premium with       | $250 |
| investment passthrough   |      |

* Note: Assumes premiums are paid at the beginning of the year, while death benefits are paid pro rata through the year.

approximately 2 out of 1,000. To cover expected death benefits for a group of 27 year-old males, a company would have to charge $199 for every $100,000 of insurance coverage. Administrative expenses, agents' commissions, and shareholders' return on equity are met by charging a loading fee. In this example, the loading fee is assumed to equal about 30 percent of the expected death benefits. Without investment returns on the premiums, the premium charge for a $100,000 annual term policy would therefore be set at $259--$199 in expected death benefits plus $60 in loading charges.
Since this insurance company receives premium payments in advance of a full year's worth of insurance coverage, a portion of the premiums can be invested and earn interest until death benefits are paid. Suppose that loading charges are paid out immediately, but that the typical premium is held on average for one-half year before it must be used to cover death benefits. Then, at an interest rate of 10 percent, roughly $10 will be earned for each expected contingent liability of $199 associated with each policyholder. This $10 of income could be used to reduce the premiums charged for the policy or could be rebated later to policyholders. If the company reduces premiums by the present value of the investment income (roughly $9), it could still earn company profit through loading charges.

As a percentage of total life insurance in force, individual term life insurance grew from 10 percent in 1954 to 15 percent in 1970 and then to 19 percent in 1981. Group life insurance, which is primarily term insurance covering employee groups, also rose from 26 percent of total life insurance in force in 1954 to 39 percent in 1970 and 46 percent in 1981. Credit life insurance, which is term insurance used to repay debt in case the borrower dies, was 3 percent of total life insurance in force in 1955 and 4 percent in 1981. 2/

Health Insurance

Health insurance is similar to term life insurance in that it provides a substantial risk-pooling function with only a relatively small investment component. The premium charged for annual health insurance will cover the expected future health expenditures and the company's loading charges. Since premiums may be paid at the beginning of periods of insurance coverage, companies can invest a portion of the premiums and earn interest until costs are incurred. The investment income can be used by the company to reduce the premiums charged to policyholders.

Health insurance has also been an increasing component of life insurance companies' sales. Health insurance premiums accounted for 12 percent of total premium receipts of U.S. life insurance companies in 1950, 23 percent in 1960, 31 percent in 1970 and 30 percent in 1982. Health insurance typically includes protection against the cost of medical expenses, including hospital and surgical expenses. It can also provide protection against loss of income from accidental death or disbursement as well as dental expenses. Health insurance is also provided by many property and casualty insurance companies.

**Annuities**

On the other end of the spectrum of investment products, life insurance companies offer savings instruments which may include little, or no, life insurance or risk-sharing component. As an example, suppose a company charges a single premium in return for a promise to pay $100,000 in twenty years to a policyholder or his designated beneficiary. An insurance component is added if, at the end of the twenty year period, the payment is converted to an annuity whose number of payments depend upon the remaining life span of the insured. The price of this deferred annuity depends on the contract interest rate and loading expenses. Since this contract pays the same amount at the same time regardless of the life status or any other risk of the purchaser, the charge would be unrelated to his age.

If the company prices the single premium deferred annuity based on a 10 percent interest rate, it would calculate the present value of $100,000 to be paid in twenty years at $14,864. The company may add a loading charge or it may expect


4/ A more elaborate policy would guarantee $100,000 if the policyholder dies before the twenty-year period expires. This type of whole-life policy is typically called a 20-year endowment contract. The added cost of a term insurance rider would be related to the age of the purchaser.
to earn investment earnings (in excess of the contract rate) sufficient to cover all expenses including company profit. It may, for instance, buy a 20-year zero-coupon bond yielding 12 percent and assess no loading charge in the purchase price.

Payments for annuity policies have also been growing as a percentage of U.S. life insurance companies' premium receipts. Payments for annuities and pensions were 8 percent of life insurance companies' total premium receipts in 1960, 10 percent in 1970, and 29 percent in 1982. Roughly three-fifths of receipts for annuities by life insurance companies in 1981 were for group plans, such as employer-provided pension plans. The remaining were for individual purchases of annuities or individual retirement accounts. 5/

**Permanent Life Insurance**

Because the cost of term insurance rises with the age of the insured, permanent insurance contracts were developed with level premiums and a level death benefit. Permanent life insurance involves significant elements of both insurance protection and investment. Permanent life insurance can be characterized roughly as an interest earning (savings) account into which premiums (deposits) are paid and from which withdrawals are made to pay for term insurance. The value of the savings component equals the accumulated value of premiums paid, plus earnings on the savings account, less the cost of the insurance. This "cash surrender value" is generally available to the policyholder upon surrender or cancelation of the policy. Chart 1 shows the increasing cash surrender value of a hypothetical whole life insurance policy 6/ with a face value of $100,000 issued to a 35 year-old policyholder at a contractual interest rate of 4 percent. The annual net premium is set at $1,445 through the age of 99.


6/ A policy with insurance protection until age 95 or later is called a "whole life" policy.
WHOLE LIFE LEVEL PREMIUM POLICY ENDOWS AT AGE 99

LEGEND

- CUMULATIVE INTEREST INCOME
- CASH SURRENDER VALUE
- CUMULATIVE MORTALITY CHARGES
- CUMULATIVE PREMIUMS

ASSUMPTIONS:
$100,000 FACE AMOUNT
4% INTEREST RATE
1958 CSO MORTALITY TABLE
NO LOADING CHARGES

DEPARTMENT OF THE TREASURY, OFFICE OF TAX ANALYSIS, MAY 1983
A few general observations may be made. A permanent life insurance policy of this type is, in substance, a contract that calls for an increasing savings account and a decreasing amount of renewable term insurance. While the death benefit provided under the policy remains level at $100,000, the amount of insurance protection that the company must provide at any given time is equal to the excess of face amount over the balance in the policyholder's savings account at the beginning of the year. For example, since the policyholder's savings account at age 56 is $33,560, the amount of pure insurance protection during that year is equal to $66,440. If a permanent policy remains in force long enough, the savings component eventually increases in value to the face amount of the policy. At that point there is no insurance component and the policy is then said to "mature" or "endow."

The cash surrender value of this policy increases in the initial years because the level premium is larger than the cost of insurance coverage. Even though the mortality rate rises steeply in later years, the value of the savings account continues to grow because the annual deposit and investment income earned always exceed the cost of the term insurance coverage. In this example, the cumulative cost of the insurance roughly equals the cumulative investment income. Thus, the cash surrender value closely tracks the total amount of premiums paid.

Based on the assumptions described above, the single premium necessary to purchase a $100,000 whole life policy would be $27,600. Because of the large initial deposit, the amount of term insurance protection provided in the initial year is only $72,400, significantly less than under a level premium policy. Over the life of the policy, the single premium results in lower
term insurance costs and a much quicker accumulation of investment income. The cumulative investment income is more than double the amount of the cumulative mortality charges until the last few years of the policy. Hence, a single premium policy has a significantly higher investment component and a smaller insurance component than a level premium policy providing the same death benefit. 7/

The earlier the age at which a policy endows, the greater its investment orientation. Under the same assumptions as above, the single premium for a policy starting at age 35 and endowing at age 65 is $34,800. This amount grows to $100,000 in 30 years, even with a modest contractual interest rate of 4 percent. The total cost of term insurance coverage under this policy would be only $9,400. Hence, virtually all of the cumulative interest earnings on the policy are used to increase its cash surrender value. Of course, if a higher interest rate were credited to the policyholder, the investment orientation of this policy would be even more pronounced.

Permanent life insurance accounted for 50 percent of total life insurance in force in 1954, 37 percent in 1970 and 30 percent in 1981. 8/ One reason for the decline is that guaranteed interest rates on permanent life insurance policies did not rise nearly as fast as other interest rates. Many other investments with low yields, such as traditional passbook accounts, also declined in importance relative to other financial investments over this same period.

7/ Testimony of John E. Chapoton, Department of the Treasury before the Select Revenue Subcommittee of the House Ways and Means Committee on the Taxation of Life Insurance Companies and their Products, May 10, 1983.

B. Variations of the Standard Products

Term insurance, whole life insurance, and deferred annuities are now the standard types of life insurance products. Numerous variations of these products exist. Two common variations involve participation or sharing in the profit of the company and variable rates of return on savings.

Participating Insurance

To establish sufficient funds to cover possible, but greater than expected, liabilities, companies selling non-participating policies typically require an initial company surplus from capital contributed by shareholders. Companies selling participating policies, on the other hand, pool the resources of policyholders to build up this surplus. Participating policyholders, thus, could be thought of as partial or full owners of the company. Mutual companies, which have no shareholders, offer only participating policies. Some stock companies offer limited numbers of participating policies, but have equity owners in addition to policyholders.

Participating policies typically pay dividends to policyholders when the "surplus" associated with the policies is above what is necessary to protect against liabilities. This "surplus" may arise from a variety of sources: higher than contractual rates of return on assets, premium payments in excess of those needed to cover expenses, improvements in mortality rates, or better management and lower costs.

Participating policies accounted for 50 percent of all life insurance in force at the end of 1982, while non-participating insurance accounted for the other 50 percent. Mutual companies
provided slightly less than 43 percent of total life insurance in force at the end of 1982. Stock companies sold the remaining 57 percent of which roughly one-sixth was participating. 9/ 

Non-traditional Forms of Life Insurance

Recent decades have seen rapidly changing financial markets and greater uncertainty over the level of future interest rates. With increases in inflation and interest rates, many non-life insurance investments offer rates of return in excess of contractual rates of interest on more traditional permanent life insurance contracts. The life insurance industry has gradually responded to this changing economic environment by creating new products, many of which offer more competitive rates of return. Some features of these policies make their saving components hardly distinguishable from accounts with banks, thrift institutions or mutual funds. Policyholders may be credited with rates of return that are variable and closely related to market rates of return, although typically there will also be a minimum guaranteed rate of return. Some policies also allow the policyholder to choose the investment goals for his policy's savings.

Universal life insurance is one example of the new type of insurance product. In addition to a variable interest rate, universal life policies differ from traditional permanent policies in that policyholders can determine the timing and amount of premiums they pay each year; they may also alter the amount of death benefit. By changing these parameters, policyholders effectively designate more or less of the premium payment as an addition to the savings account component of the policy. A universal life policy with a large insurance component can become a close substitute for renewable term insurance, while

one with a high savings component can be made into a close substitute for an annuity or a savings account at a thrift institution.

Variable life insurance is another recent type of financial contract issued by life insurance companies. Variable life is similar to universal life, except that the death payment and cash value depend on the total investment return from a portfolio that is often more risky because it includes corporate stock and real estate. In a variable life policy, a policyholder is also more likely to determine the types of assets in which the policy's savings are invested.

Non-traditional forms of life insurance are a significant share of the new life insurance contracts. Variable life insurance doubled from $3.7 billion in force in 1981 to $7.6 billion in 1982. Universal life insurance increased from $4.9 billion in force in 1981 to $40.4 billion in force in 1982. Variable and universal life policies accounted for one-sixth of the increase in total life insurance in force between 1981 and 1982. 10/

II. THE CURRENT RULES GOVERNING THE TAXATION OF INCOME FROM LIFE INSURANCE PRODUCTS

The taxation of income flowing through life insurance companies has been relatively unchanged since the enactment of the Life Insurance Company Income Tax Act (LICITA) of 1959. The Tax Equity and Fiscal Responsibility Act (TEFRA) of 1982, however, made several temporary changes for tax years 1982 and 1983. The tax rules affecting income flowing through life insurance companies can be explained most easily by examining separately taxation at the individual (policyholder) level and at the company level.

A. Taxation at the Individual Level

Compared with the tax treatment of investment income from most financial institutions, the taxation of income earned on products offered by life insurance companies provides significant tax advantages to individual investors.

First, investment income earned on life insurance policies is not subject to tax unless the policy endows or is surrendered or canceled prior to the death of the insured. Similarly, interest income earned on annuities is generally taxable, but the tax is deferred until the proceeds are received. Significant tax deferral occurs as the result of the "inside interest buildup" that is not subject to tax as it is earned, but only when distributed. Additional tax savings occur if the policyholder's marginal tax rate is lower at the time of realization than when the interest income was actually earned.

Second, when a life insurance policy is held until the death of the insured, the portion of the death benefits representing accumulated investment income is excluded from taxable income of the beneficiaries. Life insurance held at death is due to the exemption from tax of accumulated investment income, not from the exemption of other proceeds. Payments of proceeds from the term insurance component represent redistributions among policyholders which involve no increase or decrease in net income in the economy (as long as the initial premiums are made out of after-tax income). If insurance proceeds

Life insurance may also be used to avoid estate taxes. When the right to receive life insurance benefits is irrevocable by the donor, the premiums paid may be treated as a gift, and the life insurance payment is excluded from the estate tax base.
are left with the company after the death of the insured under an agreement to pay interest, only the interest earned after death is taxable to the recipient. 12/

Third, part of the investment income earned on life insurance contracts escapes taxation because the income is measured net of the cost of insurance services. Current rules require income earned on life insurance contracts to be included in taxable income when distributed only to the extent that total receipts exceed the policyholder's investment in the contract, which equals total premiums paid. However, a portion of the premiums paid over the life of the policy are used to cover the cost of personal insurance protection. These costs would not be deductible to a taxpayer who did not save through an insurance policy. Investment income thus may be used to pay for the cost of personal insurance services without ever being subject to tax.

Fourth, partial withdrawals and loans against the cash surrender value of a policy occur without any tax penalty. They are treated as being made first out of the policyholders' investment capital, rather than accumulated investment income. In contrast, early withdrawal or borrowing against the value of a tax-deferred annuity involves a tax penalty and the withdrawal is treated as first coming out of accumulated income. In addition, interest incurred in borrowing against a policy's cash surrender value is generally deductible, even though the income earned on the policy is not subject to tax currently. Policyholders who no longer wish to continue their savings through a particular policy frequently find it advantageous to borrow against their cash surrender value and hold a policy until death in order to exempt from tax the accumulated investment income.

12/ If the beneficiary is the spouse of the insured, up to $1,000 per year of interest income from the insurance proceeds may be excluded from taxable income.
Fifth, policyholder dividends from participating insurance contracts are generally not subject to tax when received, even though the dividends include a distribution of profits and interest earned by the company. Policyholder dividends, however, do reduce the policyholder's investment in the life insurance contract; if the policy is surrendered before the death of the insured, some income—though received in prior years—may be subject to tax at time of surrender or if amounts received exceed the investment in the contract.

Finally, the cost of the first $50,000 of employer-paid group-term life insurance is excluded from taxable compensation of employees. Employer-paid premiums for health insurance are also not attributed to employees either as direct compensation or, later, as receipts of medical benefits. Some proposals would cap this exclusion, but only at fairly high levels of premiums. In effect, if an employee purchases health or life insurance benefits through an employer, the cost of such benefits are deducted from income subject to tax.

Definition of "Life Insurance"

Until TEFRA, there was no statutory definition of "life insurance." While the Internal Revenue Service at times attempted to disqualify certain products from favorable tax treatment when they had almost no insurance component, life insurance companies have claimed that their products qualified as "life insurance" as long as they had only a minimal insurance component.

In contrast, only $5,000 of company-provided death benefits are excluded from taxable income of the beneficiaries.
To qualify for the exemption of investment income at death and liberal withdrawal and borrowing rules, "flexible premium" policies 14/ must meet certain tests. During 1982 and 1983, one test placed limitations on both the total amount of premiums that can be paid and the minimum amount of pure insurance in a "life insurance" contract. 15/ A second test placed a limitation on the amount of cash surrender value in a "life insurance" contract. 16/ Both of these tests attempted to disqualify from the favorable tax treatment contracts that were overly investment oriented or lacked a significant amount of pure insurance.

B. Taxation at the Company Level

Taxable income of life insurance companies is subject to tax at the same statutory tax rates faced by other corporations. The unique features of life insurance company taxation revolve around the definition of taxable income. To qualify for the many special tax provisions in Part I of Subchapter L, a company "engaged in the business of issuing life insurance and annuity contracts, or non-cancellable contracts of health and accident insurance," must keep more than one-half of its total reserves for life, health, and accident contingencies.

14/ "Flexible premium" policies allow a policyholder to change the amount and timing of the premiums and the size of the death benefit.

15/ The sum of the premiums paid can not exceed the greater of the policy's single premium or the sum of the level annual premiums payable over at least 20 years. In addition, the face amount of the policy must be at least 140 percent of the cash surrender value up to age 40, declining to 105 percent at age 75 and thereafter.

16/ The cash value may never exceed the net single premium for the face amount of the insurance.
Taxable income of life insurance companies is determined by reference to "taxable investment income" and "gain from operations." One can think of these components roughly as the company's return from financial investments, and the company's return from both investment and underwriting services, respectively. In practice, taxable investment income is intended to approximate the company's total investment income net of the share attributed for tax purposes to policyholders. Taxable investment income is sometimes called "Phase I income." Gain from operations is a measure of total income, including investment income net of the "share of investment yield set aside for policyholders" (but under a different attribution rule than for taxable investment income), plus a measure of underwriting income. Gain from operations is sometimes called "Phase II income." Taxable investment income and gain from operations will be described in more detail after a description of total taxable income.

**Total Taxable Income**

Total taxable income depends on the relationship between taxable investment income and gain from operations, as shown in Table 2. Taxable income equals gain from operations if gain

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17/ An additional provision requires that taxable income of stock life insurance companies include amounts subtracted from a "policyholders' surplus account." This account represents an accumulation of certain previously untaxed income, including one-half of gain from operations in excess of taxable investment income plus certain special deductions (discussed later in this section). Subtractions from the policyholders' surplus account occur only when distributions are made from the account or when the account exceeds certain limits. This additional provision could be considered a form of recapture tax and is sometimes called "Phase III income." In practice, few companies have yet to pay a significant amount of tax under this provision.
Table 2

Taxable Income of Life Insurance Companies

<table>
<thead>
<tr>
<th>Taxable Income Base</th>
<th>Required Tax Position</th>
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<tbody>
<tr>
<td>Gain from Operations if Gain from Operations &lt; Taxable</td>
<td>Gain from Operations &lt; Taxable Investment Income</td>
</tr>
<tr>
<td>Investment Income</td>
<td></td>
</tr>
<tr>
<td>Taxable Investment Income if Gain from Operations + 0.5</td>
<td>Gain from Operations &gt; Taxable Investment Income</td>
</tr>
<tr>
<td>[Gain from Operations - Taxable Investment Income]</td>
<td></td>
</tr>
</tbody>
</table>

From operations is less than taxable investment income, that is, if the company has underwriting "losses" for tax purposes. 18/ If the company has reported underwriting profits, taxable income equals taxable investment income plus one-half of the excess of gain from operations over taxable investment income.

Taxable Investment Income

Let us now examine in more detail the measure of taxable investment income. This measure was intended to approximate the company's investment income by subtracting from total investment income the portion of investment income owed to policyholders. Since this latter amount was usually guaranteed, net capital gains could also be expected to reside with the company.

In determining taxable investment income of the company, however, the tax laws do not merely exclude from total investment income the amount actually credited to the policyholders. Total

18/A company could report underwriting losses for tax purposes even when it has true underwriting income. The difference occurs as a result of excess reserve deductions, policyholder dividends, or other special deductions.
investment income from all sources instead is allocated between the company and its policyholders on the basis of a formula which relates the average assumed rate on the policies (for purposes of determining reserves) to the actual yield realized by the company on its investments. Investment income earned on reserves held in "separate" accounts that are established in connection with certain pension plans and variable annuities is allocated entirely to policyholders and is excluded from taxable investment income. Finally, a "small business" deduction of 10 percent of investment income, up to $25,000, is allowed for all companies.

Pre-TEFRA allocation formula. Prior to TEFRA, the allocation formula for dividing investment income (outside of separate accounts) into the company's share and the policyholders' share was based on the 10-1 rule or Menge formula (named after Walter O. Menge, an actuary who suggested the formula). The Menge formula calculated the excludable portion attributable to policyholders with the following equation:

1) Policyholders' Share = R[1-10(R-R_A)](Reserves)

where R equals the lesser of the current earnings yield or its five-year average and R_A equals the average rate of interest assumed on reserves.

Some examples will illustrate the odd nature of this parabolic function. First, if the assumed yield (R_A) was 4 percent and the actual yield (R) was 6 percent, the

19/ If the assumed rate, R_A, is constant, the formula is that of a parabola in R. That is, the Policyholders' Share = -10R^2 + [1 + 10R_A] R.
Company was allowed to exclude 80 percent of investment income earned on reserves as attributable to policyholders. If policyholders were actually credited interest at the assumed rate, then only 67 percent of investment income from reserve assets (4 percent/6 percent) was set aside for the benefit of policyholders. With an assumed rate of 4 percent and an actual yield of 10 percent, the company excluded 40 percent of investment income, which was the precise amount credited to policyholders. At interest rates between the assumed 4 percent rate and a 10 percent rate, the excluded amount exceeded the amount credited to policyholders. At an assumed rate of 4 percent and interest rates higher than 10 percent, the excluded share was less than amounts credited; if the lesser of the current rate or a five-year average rose to 14 percent, the excluded share equaled zero.

As interest rates rose in the late 1970's, many life insurance companies were expecting to move to the downward sloping portion of the parabolic function where they would exclude a smaller amount of investment income. Since actual yields were based on the lesser of the current yield or the prior five-year average, few, if any, insurance companies reached the point where the amount excluded was less than the amount credited to policyholders. Thus, the Menge formula allowed companies to exclude from their income more investment income than they credited to policyholders, but the amount of the exclusion was expected to decline by the early 1980's. 20/

20/ The rationale for using the Menge formula rather than simply allowing companies a deduction for the amount of interest credited to policyholders is somewhat difficult to ascertain. The 1959 Act reformed prior law by moving away from calculating the policyholders' share of investment income on the basis of an industry average or a fixed formula. The Menge formula at least related allocation of shares to the experience of each individual company. The argument for use of the current earnings rate was that competitive pressures would force life insurance companies to credit to policyholders rates of interest on reserves higher than the stated
TEFRA allocation formula. The allocation formula for taxable investment income was changed for tax years 1982 and 1983 to a "geometric" formula by TEFRA. The new formula sets the policyholders' share as follows:

2) Policyholders' Share = R [0.9 \left\{ 100 \times \frac{(R - R_A)}{Reserves} \right\}]

The amount excludible as the policyholders' share is still based on the relationship between the average assumed rate and the actual yield (again, the lesser of the current yield or its five year average). The new formula insures that if interest rates remain within their recent historic range, the excluded amount will be larger than the amount credited to policyholders. For instance, with an assumed interest rate of 4 percent and an actual yield of 10 percent, insurance companies could exclude the equivalent of 5.3 percent of reserves (10 percent times 53 percent) rather than the 4 percent contractual rate.

Gain from Operations

Gain from operations in its simplest guise can be viewed as a measure of total income of the life insurance company, including both investment and underwriting income, net of the share of investment income set aside for policyholders. In calculating gain from operations, however, investment income is allocated to policyholders differently than in calculating taxable investment income. The exclusion of the policyholders' share is the amount credited to policyholders (at the assumed interest rate).

(Continued)

contract rate. However, the Menge formula did not recompute reserves to compensate accurately for an increase in the current earnings rate. Thus, companies in effect were allowed to deduct the policyholders' share calculated at higher interest rates and higher reserve deductions computed at lower interest rates.
Deductions for additions to reserves. Since permanent insurance premiums cover both the cost of insurance protection and an amount set aside as policyholder savings, part of the gross premium is roughly equivalent to a deposit in a bank. Such a deposit represents an addition to both assets and liabilities of the institution, not income. Thus, a deduction equal to the net additions to policyholder reserves (or the increase in liabilities) is allowed to offset the equivalent amount of receipts (or increase in assets). Other depository institutions achieve a similar result by counting neither the deposit as a receipt nor the equivalent addition to reserves as a deduction in calculating taxable income.

Reserve requirements are set primarily by State laws. Because the concern of these laws is with the protection of policyholders, not with the accurate accounting of economic income, assumptions with regard to required interest rates, mortality rates and reserve methods typically are conservative. The Tax Code nonetheless has allowed a deduction for all additions to reserves required by State laws. Also, companies may use assumed interest and mortality rates even more conservative than required by State laws in computing their reserves for tax purposes. Therefore, deductions for additions to reserves generally are in excess of what is economically necessary to cover expected expenses or liabilities. This results in an understatement of (expected) company income and significant tax deferral.

With regard to the timing of premium receipts and loading expenses, life insurance companies can calculate their reserves for tax purposes using a net level premium method or preliminary term method or a combination of those methods. The net level premium method assumes that additions to reserves are made out of a constant premium, net of loading charges. This method assumes that loading expenses are amortized over the duration of the policy, even though agents' commissions and administrative costs
typically are paid in the initial years and are deducted currently. The preliminary term method, on the other hand, assumes that all loading expenses are covered by the initial premium payments. With this latter method, the net addition to reserves is lower the first year, but higher during the rest of the premium-paying period.

Companies can choose modified preliminary term methods that compute the amount of reserves closer to the amount allowed under the net level premium method. Thus, companies can assume that only part of the initial premium payments are used for loading expenses and assume that the remaining amount is used to pay current insurance charges or to fund reserves. Modified preliminary term methods often speed up the additions to reserves by "grading" reserves up to the level allowed under net level premium reserve methods over a 5-15 year period.

Life insurance companies that compute their reserves for State regulatory purposes on a preliminary term basis are allowed to compute their reserves on a net level premium basis for tax purposes. Revaluation of State law reserves from preliminary term to net level premium can also be computed by an approximate method. Prior to TEFRA, the approximate revaluation method allowed preliminary term reserves for other than term insurance to be increased by $21 per $1,000 insurance in force, less 2.1 percent of reserves already established under such contracts. TEFRA permanently reduced the revaluation amount from $21 to $19 per $1,000 of non-term business written after March 31, 1982. 21 Even with the revision, the approximate revaluation formula permits an adjustment substantially in excess of that needed to approximate a net level premium reserve for most policies.

21/ Term insurance contracts, which at the time of issuance cover a period of more than 15 years, can be revalued through an approximate method which increases reserves $5 per $1,000 of such insurance in force, less 0.5 percent of existing reserves under such contracts. This provision was not changed by TEFRA.
Special deductions. Life insurance companies are allowed special deductions not available to other financial institutions. These special deductions were designed as part of the 1959 Act to improve "parity" in the amount of taxes paid by the mutual- and shareholder-owned sectors of the life insurance industry.

Two special deductions are related directly to premiums. First, life insurance companies can deduct two percent of premiums for accident and health insurance contracts and group life insurance contracts. This special deduction, it was argued, would compensate for the fact that group insurance policies have less diversification of risk than non-group policies. Second, stock companies are allowed to deduct the greater of three percent of premiums on non-participating contracts or an additional ten percent of the increase in reserves for such contracts. The special deduction for non-participating contracts supposedly allows stock companies to build up a surplus out of pre-tax income similar to the surplus achieved by mutual companies through redundant premium charges. Neither special deduction, however, requires a reserve fund to be established out of the pre-tax earnings to cover any additional risk incurred. Since profits for many companies are only a small percentage of sales, each of the deductions can have significant effect on taxable income.

Another special deduction is allowed for policyholder dividends paid on participating insurance contracts. As described in the first section, policyholder dividends may be paid when the surplus associated with participating policies is above the amount necessary to protect against large unexpected liabilities. Part of policyholder dividends consists of return


of capital from prior year's premiums or from excess premiums paid in the same year. Since investment earnings and underwriting gains increase company surplus, policyholder dividends also include some return of income. Accordingly, a limitation was placed on the amount of deductible policyholder dividends and other special deductions. 24/ (Section III discusses the difficulty of measuring the income component of policyholder dividends.)

Prior to TEFRA, the amount of special deductions was limited to the excess of gain from operations above taxable investment income, plus $250,000. 25/ Thus, the special deductions could eliminate, or defer 26/, tax liability on underwriting income plus a small amount of investment income. The proportion of policyholder dividends that could be deducted declined during the 1960's and 1970's for both stock and mutual institutions. This decline coincided with a reduction in the ratio of excess of gain from operations to taxable investment income. As interest rates rose, investment income grew. To reflect actual interest rates higher than the policies' contractual rates, some companies reduced premiums, while other companies increased policyholder dividends.

TEFRA temporarily expanded the limitation on special deductions to the greater of 1) excess of gain from operations above taxable investment income plus up to $1 million, depending


25/ The additional $250,000 deduction against taxable investment income was allowed especially to help small companies that might experience temporary underwriting losses when they expand their operations. U.S. Congress, Senate Committee on Finance (1959), p. 22.

26/ The untaxed portion of gain from operations is added to the company's "policyholders' surplus account". The tax will be deferred rather than eliminated if the untaxed portion of gain from operations is included in future taxable income.
on the size of the company, or 2) the sum of all policyholder dividends credited to qualified pension plans, the statutory amount of $1 million, and 77.5 percent of policyholder dividends paid by mutual life companies or 85 percent of the sum of policyholder dividends and the deduction for nonparticipating contracts for stock companies. The differential between the mutual and stock companies' allowable percentage was an ad hoc adjustment for the equity return or "ownership differential" of mutual companies.

III. MEASUREMENT OF TOTAL TAXABLE INCOME FROM LIFE INSURANCE PRODUCTS

Total economic income generated from life insurance products is commonly divided into investment income earned on assets and income from providing insurance and other non-investment services. From an economic perspective, total investment income equals the investment yield on all assets held by the insurance company minus the factor cost of servicing the investment portfolio. Total service income equals the net amount paid for services; in the simplest case of pure insurance with no investment component, service income equals total receipts less payments of insurance proceeds, which in turn equals the factor cost of servicing the contracts. That is, the income earned by the factors involved in providing services equals the value of the services or products received by policyholders. 27/ This income is paid to many factors both within and outside the company as labor compensation, rent, interest to non-policyholder creditors, and company profit. Company profit from providing services (other than investment services) is generally labeled "underwriting income." Because it is essentially a residual number--the remainder after all other costs and investment income are subtracted from receipts--its measurement is often subject to a great deal of dispute.

27/ See Table 1.1 in Neubig and Steuerle (1983), p. 12.
At the policyholder level, it should be clear that total income does not include all payments received. Analogous with the game of roulette, if premium payments (or bets) are made out of income already counted, then the returns on those bets do not add to income, but rather represent a redistribution of income. After accounting for this redistributional effect, the net income added simply equals the return to the house in the case of the roulette wheel or the payments to factors in the case of insurance. Policyholders as a group are willing to receive total insurance proceeds less than total premiums paid because the difference represents the value of services received. If the house (or insurance company) adds an investment policy which allows prepayment for chips (or insurance) to be received at some point in the future, then the investment return on those savings also represents an addition to economic income.

This brief review of the components of economic income allows us to turn to the five major sources of differences between the measurement of taxable income and total economic income actually flowing through life insurance companies: tax-preferred products offered by life insurance companies to individuals; services financed with nontaxable investment income; incorrect separation of returns to capital (income) from returns of capital (principal); tax-preferred assets held by life insurance companies; and special tax preferences exclusively for life insurance companies. Related questions of whether total income is allocated properly among recipients or types of activities, and whether deductions for future liabilities are appropriate, are reserved for later sections of this paper.

A. Tax-Preferred Products Offered by Life Insurance Companies to Individuals

Current tax laws allow life insurance companies to offer substantial tax savings to households that purchase certain insurance products. These preferences fall into three principal

categories: the deferral of investment income from taxation; the exclusion of investment income from taxation; and the deduction or exclusion from income of the value of purchases of certain types of insurance. These exclusions, deferrals and deductions are generally not allowed for purchases of similar types of products from other financial institutions.

Deferral of Income

One of the most important tax preferences for life insurance arises from the deferral of investment income from the current tax base of individuals. The inside buildup of investment income is deferred from taxation until the policy is canceled or matures. Even if the taxpayer is in the same tax bracket at time of withdrawal as during time of buildup, the deferral of taxation can result in a substantially lower present value of taxes and a higher rate of return net of taxes than if the income were taxed currently. In fact, many policyholders are in substantially lower brackets at time of withdrawal and thus achieve even further tax savings.

Deferral of taxes is allowed for the earnings on both permanent life policies and on annuities sold by life insurance companies. Our discussion here refers to purchases made by taxpayers out of after-tax income rather than annuities connected with pension plans and individual retirement accounts. For some policies, there need not be even a significant element of insurance against death, and the entire premium may go into the equivalent of a savings account. For instance, a premium may be used to purchase a deferred annuity—a policy which provides for the accumulation of previous payments and interest until the policyholder withdraws the fund or converts the fund into a right to receive periodic payments. If the policy also allows for withdrawal of savings at any time, then there is hardly any difference between it and a simple savings account.
The benefits of tax deferral can be illustrated using the hypothetical permanent life insurance policy described in section I. A policyholder who surrenders or cancels the policy at age 70, would have earned $40,704 of investment income on the policy and would have a tax liability of $12,211 if subject to a 30 percent marginal tax rate. No tax liability is paid on the investment income earned until the policy is canceled. Assuming the policyholder is in the same marginal tax bracket for the duration of the policy, the tax savings from postponing tax liability until surrender is roughly equivalent to a 40 percent reduction in the present value of taxes that would have been paid on the investment income. The advantages of tax deferral increase with the length of deferral.

Income Exclusion

The second type of tax preference provided to those purchasing policies of life insurance companies arises from the exclusion from taxation of investment income received upon death. The exclusion is not granted if the savings are withdrawn before death. We have already noted that the exclusion of term insurance proceeds is appropriate to the measure of aggregate income if the premium payments have been made out of after-tax income. Redistributions of after-tax income need not be taxed. A beneficiary of a life insurance policy, however, may receive not only a redistribution from living policyholders, but also the capital in the deceased's savings account and the accumulation of investment earnings in that account. The deferral of tax on investment earnings is converted into a permanent exclusion from tax through the death-time exclusion. The Tax Code thus provides a strong incentive for persons with bequest motives to save through insurance policies rather than directly through other investment vehicles.

29/ In fact, the tax liability would be considerably less because of the deduction of costs of services due to inaccurate measurement of the investment in the contract. See section III(B).
Deduction of Costs of Services

In addition to exclusions and deferrals of the inside interest buildup of life insurance products, the Tax Code also allows a deduction or exclusion from income for the cost of insurance products. In particular, employees' taxable compensation is measured net of the cost of employer-provided health insurance, a variety of disability and accident policies, and the first $50,000 of employer-paid group term life insurance. Neither the value of the insurance proceeds nor the cost of the services received are included in taxable income of the beneficiaries.

If all income were to be taxed, then the purchase price of the fringe benefits and the investment income on the policies would be included in taxable income. Alternatively, the payments made from these policies (e.g., cash paid to the beneficiaries of life policies or payments for medical bills), plus the value of insurance services received, would be treated as income subject to tax. Uniform income taxation would require that all life insurance proceeds be subject to tax when both the income used to make premium payments and the accumulated investment income have not been taxable. For most insurance programs, it is probably fairer and more rational to tax the income used to buy insurance than the redistributed income received as benefits due to death, disability, or illness. 31/

30/ A major exception involves disability payments or wage continuation plans of persons who are not permanently disabled or not otherwise eligible for the disability income exclusion. Even though some of these payments are taxable, the value of the services received by covered employees remains nontaxable.

All of the preferences discussed in this section apply essentially at the individual level. There are two implications, however, at the level of the financial institution. First, tax preferences increase demand for the preferred products. Economic theory holds that the benefits of tax preference may be shared between demanders and suppliers, and thus, the financial institutions may indirectly gain some of the benefits essentially granted to individuals. In the short run, this benefit may be a higher level of profitability or wages paid to factors; in the long run, it may result in a larger life insurance sector. Second, taxes paid to the government by insurance companies may represent not only taxes on the income of the "equity" owners of those institutions, but also indirect taxes on the income of policyholders which benefits from tax exclusions, deferrals or deductions granted at the individual level.

B. Investment Income Net of Services at the Individual Level

An income tax should measure only the net return, not the gross return, to investment. Thus, the cost of earning investment income is generally a deductible expense at both the individual and company level. Economic income will be mis-measured, however, if the cost of non-investment services received are also deducted from individuals' investment income.

Most individuals purchasing just term life or health insurance receive no deduction for any portion of their premiums. It is recognized that purchasers of insurance receive a benefit in return for their payment. For these policyholders as a group, the net value of the insurance services equals premiums paid less payments received. Persons holding policies with an investment component, on the other hand, have a decided tax advantage over
holders of term or health insurance because the cost of insurance services received is effectively deducted from investment income. The measure of investment income is thus understated by the value of the services purchased.

The issue is made more complicated by the existence of two kinds of services—investment services and non-investment or insurance services—in most insurance products. Fortunately, the net investment return is often stated directly by the insurance company either in a guaranteed rate or in a rate directly attributed to the savings component. Such investment income has already been reduced by the company to account for its costs of servicing the investment, and it should not be reduced further to account for the cost of other services. Under current law, however, taxable income earned on a policy that is canceled or which matures prior to the death of the insured equals the cash surrender value minus total premiums paid. Using total premiums paid as the "investment" in a life insurance contract effectively allows the cost of the personal protection service to be deducted from income. Technically, even if deferral is allowed, the investment in an insurance contract should equal total premiums paid less the cost of comparable renewable term insurance coverage.

Table 3 shows the difference between the amount of taxable investment income and actual investment income for the hypothetical policy described in section I. Taxable income is only $8,328 if the policy is surrendered at age 70, while accumulated investment income equals $40,704. The difference of $32,376 equals the cost of term insurance coverage paid out of investment earnings during the preceding 35 years. The mismeasurement of the policy's investment (or basis) effectively
Table 3
Comparison of Taxable and Actual Investment Income of Hypothetical Permanent Insurance Policy *

<table>
<thead>
<tr>
<th>Age at Surrender</th>
<th>Cash Surrender Value</th>
<th>Taxable Investment Income</th>
<th>Actual Investment Income</th>
<th>Ratio of Taxable to Actual Investment Income (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>40</td>
<td>$ 8,040</td>
<td>$ 8,673</td>
<td>$ 0</td>
<td>1,058</td>
</tr>
<tr>
<td>50</td>
<td>24,087</td>
<td>23,129</td>
<td>958</td>
<td>7,448</td>
</tr>
<tr>
<td>60</td>
<td>42,356</td>
<td>37,585</td>
<td>4,771</td>
<td>20,536</td>
</tr>
<tr>
<td>70</td>
<td>60,369</td>
<td>52,040</td>
<td>8,328</td>
<td>40,704</td>
</tr>
<tr>
<td>80</td>
<td>75,639</td>
<td>66,496</td>
<td>9,143</td>
<td>67,248</td>
</tr>
<tr>
<td>90</td>
<td>87,113</td>
<td>80,952</td>
<td>6,162</td>
<td>98,842</td>
</tr>
<tr>
<td>99</td>
<td>100,000</td>
<td>93,962</td>
<td>6,038</td>
<td>131,177</td>
</tr>
</tbody>
</table>

* Calculations are based on an example of a level-premium, level-death benefit policy described in Section I.

allows a deduction for the cost of the insurance services. The tax liability on investment income earned on the policy is reduced by roughly 80 percent, not counting the additional advantage of tax deferral.

All insurance, even term life and annual health insurance, have some investment component. Premium payments are held by the company in investments earning a rate of return. Some of that rate of return is implicitly returned to the policyholder in the form of a lower price for the insurance service. Here, again, the positive investment income of the policyholder, by being measured as zero is understated, although the amounts involved are not large relative to the cost of the policies.
One reason that this tax preference is often unrecognized is that other preferences at the individual level are even more generous. The owner of a canceled or matured policy receives deferral of earnings, not just understatement of earnings by the amount of services effectively purchased with prior investment income. For life insurance proceeds paid at death, all income is excluded from tax, not merely deferred and understated.

C. Separation of Income from Return of Capital

An income tax must distinguish between returns to capital (income) and returns of capital (principal). Stockholders, for instance, must know the extent to which any payment includes dividends paid from income rather than returns of investment dollars for which there is no related income. Similarly, in the case of life insurance contracts, it must be determined whether payments include income or only returns of capital or premiums. We have already noted that payments of insurance proceeds include both returns to capital (through investment earnings on savings) and returns of capital (through redistributions among policyholders and returns of savings deposits). Dividends from participating insurance contracts also contain each of these types of returns.

Policyholder Dividends

Policyholder dividends, along with reductions in the price of insurance, are the principal means by which life insurance companies distribute income and excess capital to participating policyholders. In the case of a mutual life company, where there are no shareholders, up-front price reductions and policyholder dividends are the only ways to make distributions to policyholders who are technically the owners of the company. The
principal income measurement problem is the determination of the extent to which policyholder dividends include a return of investment and underwriting income, as opposed to a simple return of capital.

A measure of the income included in policyholder dividends can only be estimated. Conceptually, excess premiums would approximate, at least over the long run, the difference between the price of participating and nonparticipating contracts of comparable terms offered by the same company. However, since mutual companies issue only participating contracts, this type of comparison is generally not feasible. A comparison of participating policies of mutual companies with nonparticipating policies of stock companies may be inaccurate if other cost differences exist between the two types of companies.

Any procedure for estimating the income portion of policyholder dividends will at best represent a rough approximation. It is nonetheless possible to set limits on an estimate of total income included in policyholder dividends at the company level. Since these limits affect other allocation and attribution issues, discussion is deferred to later sections.

Partial Surrenders and Borrowing Against Cash Values

Under current law, partial surrenders and cash withdrawals prior to the death of the insured are included in taxable income only when the cash received from cumulative partial withdrawals exceeds the investment in the contract. The implicit stacking rule behind this law assumes that withdrawals are made first from capital, then from investment income.

Distributions from life insurance companies to policyholders can also take the form of loans against the policy's cash surrender value. Under current law, such policy loans are
treated as a distribution of capital. The interest paid on the loan is deductible currently even though the tax on investment income is deferred or eventually exempted at death. Thus, policyholders can avail themselves of their funds while continuing to earn tax-deferred income (or tax-exempt income if the policy is held until death). A taxpayer literally can be in the position of paying himself a dollar of interest income, and deducting the payment from taxable income, while never counting the receipt.

The tax treatment of loans made to qualified pension plan participants and partial withdrawals from annuities was changed in TEFRA. Congress was concerned that borrowing against tax-favored assets would diminish the amount and incentive for retirement savings. 32/ Under the new rules, any loan that is not required to be repaid within 5 years, or is in excess of a sizeable portion of the accrued benefits, is treated as a distribution. TEFRA also changed the ordering rules in the case of partial surrenders or withdrawals of cash surrender value for annuities. Cash withdrawals are first treated as taxable investment income and then as nontaxable return of capital.

The rationale for the TEFRA changes would apply equally to partial withdrawals and surrenders from other life insurance and endowment contracts, as well as policy loans. If investment income is subject to tax at the individual level, then a strict stacking or ordering rule would be appropriate for distributions through partial surrenders or policy loans. Such rules would reduce, not eliminate, the substantial benefits from tax deferral.

D. Tax-Preferred Assets Held by Life Insurance Companies

In the previous parts of this section, we have dealt primarily with tax preferences which relate directly to the products sold by life insurance companies and which are of benefit primarily at the individual level. Life insurance companies may also affect their own tax liabilities by purchasing tax-preferred assets.

Company level investment earnings generally do not receive the tax exclusion or deferral available to earnings of individual policyholders. Companies, therefore, have some incentive to hold tax-preferred assets to reduce corporate tax liability. If life insurance companies were allowed to hold one portfolio of assets for themselves and another as savings accounts of policyholders, then it is likely that many of the assets in their portfolios would be tax-exempt bonds or similar tax-preferred assets. Indeed, this is a common practice with many other financial institutions.

In the case of life insurance companies, however, the assets of the company are not separated from the assets held for policyholders. Specifically, the tax laws require that tax-exempt interest and intercorporate dividends be allocated between the company and policyholders in the same proportion as all investment income. The tax exemption of interest on State and local debt and the deduction for intercorporate dividends received only applies to the portion attributable to the company.

Tax-exempt Bonds

The proration rule prevents life insurance companies from achieving a negative tax by both deducting interest payments to policyholders and treating total interest on State and local government debt as tax-exempt income at the company level.
For example, if a life insurance company receives $70 of interest on State debt and its share of investment income is 40 percent, $42 of the interest income is deemed to be paid to policyholders and is excluded from the company's taxable income. The remaining $28 is tax exempt at the company level. Most other financial institutions would treat the full $70 of interest received from State debt as tax exempt as well as deduct any interest payments to creditors. The interest deduction is then used to shelter from tax income from other sources.

Since a large portion of investment income is attributable to policyholders, the rule effectively allows life insurance companies to gain only a small percentage of tax savings from holding tax-preferred assets. Life insurance companies hold relatively few tax-exempt bonds because their own tax savings are generally less than the difference in yield between fully taxable and tax-exempt securities. Long-term tax-exempt rates are roughly 70 percent of fully taxable yields. The life insurance company in the above example, for instance, would prefer to earn $100 of taxable income, exclude $60 as the policyholders' share, and receive $81.60 after-tax as opposed to investing in tax-exempt bonds and earning only $70 after tax.

**Intercorporate Dividend Deduction**

The principal justification for the deduction of intercorporate dividends received is to eliminate the possibility of triple taxation of corporate dividends. Taxation might otherwise occur at an originating company, a second corporation holding equity in the first, and the shareholder of the second corporation. The intercorporate dividend received deduction, in combination with the life insurance companies' proration rule for investment income, essentially eliminates tax liability at the
life insurance company level, as intended. Other equity holding corporations do not have as strict a proration rule. They may borrow to invest in corporate equity, deduct most intercorporate dividends received and still deduct most or all interest payments against other income.

E. Other Special Preferences for Life Insurance Companies

At the company level, taxable income is also less than economic income because of special tax preferences which are unique to life insurance companies.

As noted in section II, if gain from operations is greater than taxable investment income, taxable income for a life insurance company is equal to taxable investment income plus one-half of the excess of gain from operations above taxable investment income. The other one-half of this gain is technically deferred, but in practice it has been effectively excluded from income subject to taxation. The exclusion of one-half of underwriting income is argued to provide a "cushion" for stock companies in the event of catastrophic losses. This special exclusion is not available to other financial institutions (although they too benefit from special tax provisions). While only one-half of underwriting income is subject to tax, underwriting losses are allowed to offset investment income on a dollar-for-dollar basis.

33/ The formula works for marginal, as well as average, investment decisions. Suppose a life insurance company increases its liabilities to policyholders by $100 and buys $100 of dividend-paying stock. If $11 is earned in dividends and $10 is paid in interest to policyholders, then income attributable to policyholders for tax purposes will also increase by exactly $10 and company level income eligible for the dividend received deduction will increase by only $1. In algebraic terms, suppose prior policyholder level income was C and prior total income was T. Then the change in policyholder level income equals \([(C+\$10)/(T+\$11)][T+\$11] - [C/T]T\), or $10.
The 1959 Act also allowed several other special deductions in an attempt to achieve "parity" between the mutual and stock sectors of the life insurance industry. Special deductions for group term, health and accident, and non-participating contracts reduce the taxable income of stock companies and make it closer to that of mutual companies which have larger deductions for policyholder dividends (for detail, see section II). These special deductions, however, have little or no relationship to the total economic income of life insurance companies.

In addition, a "small business" deduction exempts a portion of investment income from tax. This deduction is available to all life insurance companies, regardless of size, and is in addition to other provisions in the Tax Code applicable to "small businesses."

IV. ALLOCATION OF TAXABLE INCOME BETWEEN RECIPIENTS

As long as taxpayers face different tax rates, it will be necessary to allocate income among taxpayers even if accounting procedures otherwise insure that all income is properly measured. That such rates will differ is a consequence of a tax system which provides for a corporate tax unincorporated with the individual income tax, a progressive individual tax rate schedule, and zero tax rates for low income individuals, foreign investors, and tax-exempt institutions.

There are three difficult problems of allocation of income among recipients of income flowing through life insurance companies. First, investment income must be divided between the company and its policyholders. Second, even if income can appropriately be allocated to policyholders as a group, additional allocation rules would still be needed to determine the exact amount of income received by each individual. Third,
one must determine the extent to which payments to policyholders, in particular, the income portion of policyholder dividends, are deductible from company income as payments to creditors or to mutual partners, and to what extent such payments are nondeductible dividends paid out of corporate income to "equity" owners. (For the discussion in this section, we will assume that income has been separated from returns of capital.)

A. Allocation of Investment Income Between Company and Policyholders

Companies' taxable investment income is measured using a formula which first calculates the amount of investment income attributable to policyholders. Because the contractual interest rate (typically the "assumed" rate) on policies is generally less than market interest rates, the amount of reserves needed at market interest rates is less than the amount determined with contractual yields. The legal formula attempts to adjust the amount of reserves downward for the overstatement based on a relationship between actual and contractual interest rates. The adjustment, however, is only an approximation and generally allows companies to exclude from tax more investment income than is credited to policyholders.

In the computation of gain from operations, a different allocation rule is used to calculate the exclusion of investment income attributed to policyholders. Here the share of investment income attributed to policyholders is set equal to the policyholder reserves multiplied by the contractual interest rate. The contractual rate generally is consistent with the rate used to determine the amount of State law reserves.

In TEFRA, Congress allowed life insurance companies to deduct "excess interest" paid on annuity contracts from both taxable investment income and gain from operations. "Excess interest" is
investment income that is credited to policyholders at rates in excess of the minimum contractual rates; the rates actually paid are often guaranteed to be in excess of that minimum for a temporary future period. In the case of life insurance policies such as variable or universal life policies, the Internal Revenue Service has ruled that any "excess interest" will be treated as policyholder dividends which are deductible to the limited extent discussed in Section II. 34/

An alternative approach to the allocation of investment income between companies and policyholders would simply allow a deduction at the company level for any amount credited to policyholders. This approach would recognize that companies do indeed credit amounts of investment income to policyholders in excess of the contractual rate. The difficulty here is not one of allocation, but of limiting tax-free income at the individual level.

B. Attribution of Investment Income to Specific Policyholders

One rationale for not taxing the "inside interest buildup" of life insurance policies, or at least not taxing this income until it is distributed, is the difficulty of measuring the income earned by each policyholder. Allocation to specific individuals would require calculation of each person's share of investment income. This income in turn is affected by the amount of each policyholder's price rebate, change in withdrawable savings, and perhaps even the cost of the insurance service (including variable commission costs not always allocated on a policy by policy basis). One might reasonably debate how to allocate this income, as well as related costs, among individual policyholders.

It should be noted, however, that all permanent life insurance contracts specify a cash surrender value and guaranteed interest rate earned for the policyholder. Many of the new life insurance products, such as universal life, clearly identify separately the cost of the insurance service, the investment income and the accumulated savings for each policyholder.

Substitute Tax on Income of Policyholders

A substitute or "proxy" tax levied at the business level on the inside interest buildup of individuals would avoid the requirement of individual allocation. Such a proxy tax could replace sometimes complex methods of taxing income from insurance proceeds at the individual level. For instance, there would be no need to tax policyholder distributions prior to death nor to worry about the portion of annuity payments that represent deferred income. A proxy tax would also eliminate the difficult measurement problem of separating the costs of investment services from non-investment services in determining policyholders' correct investment in their life insurance contract. No special exclusions would have to be provided for payments at death.

The major difficulty with a "proxy" tax would be that the tax rate would apply to all investment income of policyholders, irrespective of their individual marginal tax rate. An average of the policyholders' marginal tax rates would be higher than the rates of some individuals and lower than the rates of others.

Any substitute tax would almost inevitably be levied at a rate below the top personal rate. Consequently, it may be appropriate to impose limits on the use of these forms of investment to protect against tax shelter abuse. Of course, analogous limits may also be appropriate where, as under current
law, little if any tax is even imposed on income earned by many policyholders. These limits could apply to policies with explicit savings accounts or at least policies where a large percentage of premium payments are treated as additions to savings of a policyholder. One possible limitation, in addition to a proxy tax levied at the company level, could require insurance companies to provide their policyholders with statements of income which indicated the current yield earned by the company multiplied by the individual's average cash surrender value during the year. If the total amount received by any individual exceeded some limit, then that amount could be added to the individual's taxable income. For those individuals, a credit equal to the amount of the substitute tax paid on that income at the company level could be claimed. This procedure would prevent a proxy tax from becoming a tax shelter vehicle. Alternatively, "life insurance" policies with excessive investment orientation could be denied the favorable tax treatment currently afforded traditional life insurance policies by tightening the tax definition of life insurance.

With the typical insurance policy, the tax savings in excess of any proxy taxes paid would probably not offset the cost of services. Taxpayers looking solely for an investment shelter would not find these costs worthwhile. Still, new companies and new types of policies are being developed all the time, and the marginal policy need not reflect the typical policy. If a level playing field is to be established for all institutions, one industry should not be allowed to create special policies for high income individuals which provide minimal insurance services and serve primarily as tax shelters for investment income.

C. Mutual Versus Stock Owners

With an unintegrated corporate tax, there will always be legitimate debate over the extent to which mutual owners should be treated like unincorporated partners or as corporate owners of their company. A similar question arises over the extent to
which payments of income generated at the corporate level should be treated as payments of interest, and hence deductible at the corporate level, or as payments of nondeductible dividend payments to owners of the corporation.

Life insurance companies are often at the center of this debate. Since the inception of the corporate tax in the United States, all life insurance companies have been subject to the corporate tax. Mutual insurance companies argue for parity between themselves and noncorporate partnerships or other mutual organizations such as mutual funds which are exempt from corporate tax. Some mutual payments may be considered similar to deductible interest payments to bondholders of stock companies. On the other hand, stock insurance companies argue that mutual funds often hold shares of corporations which have already paid a tax on the income being received. In addition, the income paid to mutual fund shareowners, and interest paid to bondholders, is taxable at the individual level. Finally, stock companies would be severely disadvantaged if mutual companies could raise capital, and then exempt related income from tax at both the company and individual level.

A major obstacle to achieving uniform taxation of economic income arises because the total income of a mutual life insurance company and its policyholders can not be directly observed. Mutual companies sell "participating" insurance policies which use premiums to provide equity contributions similar to the capital contributed by shareholders to a stock company. This equity is needed, at least initially, both to supply surplus for unlikely, but possible, contingencies and to cover nonfinancial capital requirements such as buildings and office equipment. A participating policyholder would expect some return for the use of this capital. The return to the participating policyholder, however, is never directly observed or measured because it takes the form of reduced premiums, increased policyholder dividends, or higher cash surrender values.
At the company level, mutual companies may appear to be earning a below-average return on company equity because these distributions of equity income to policyholders reduce measured company income. Needless to say, over the long run a going concern would earn a normal profit on its equity capital, or else "owners" including participating policyholders would "invest" their funds elsewhere.

Often it is assumed that all of the equity capital raised by stock companies is through capital contributions of shareholders. However, additional capital can also be raised by stock companies through the sale of participating (or similar) policies. Some of the profit earned on the additional capital would ultimately be received by the participating policyholders as a return on their investment. We would still expect, nonetheless, that some of the profit from any policy sold by stock companies would accrue to the benefit of the stockholders.

The current treatment of returns to participating policyholders encourages companies to raise capital through sales of participating policies and to distribute a greater proportion of their current earnings to policyholders, rather than retaining the earnings. In contrast, the taxation of dividends as ordinary income and the favorable tax treatment of capital gains encourage stock corporations to retain earnings so that shareholders receive income in the form of deferred or excluded capital gains.

Current Tax Rules Relating to Parity

Current tax law attempts to achieve parity between stock and mutual companies through a number of different provisions. The main approach to establishing parity is to reduce stock companies' measure of taxable underwriting income closer to zero, the amount effectively claimed by most mutual companies. For mutual companies, deductions of policyholder dividends against gain from operations generally leaves taxable only investment income.
The reduction in stock companies' measure of taxable underwriting income is achieved first by allowing one-half of any gain from operations in excess of taxable investment income to be deferred from tax. Second, stock companies are allowed a special deduction for a percentage of premiums received from nonparticipating contracts. It is argued that the additional "cushion" provided by excess premiums charged mutual policyholders must be partly generated by stock companies through the build-up of company surplus with after-tax income. 35/ Third, stock companies may offset additional underwriting gain with special deductions for group accident and health insurance policies and the approximate revaluation method for calculating additions to reserves. The combination of all of these special provisions significantly reduces the amount of taxable underwriting income of stock life companies.

The temporary rules in TEFRA placed different limits on the extent to which policyholder dividends are deductible to stock and mutual companies. Stock companies are allowed deductions for a greater percentage of policyholder dividends (85 percent compared with 77.5 percent) because mutual companies are assumed to pay out all corporate income as policyholder dividends, while stock companies must pay dividends to shareholders without deduction at the company level. 36/

As might be obvious by now, this treatment of stock and mutual companies is based more upon political compromises and maintenance of historic relationships between tax payments of mutual and stock segments than upon any real attempt to accurately measure the economic income in question. Parity is established not by making all income uniformly subject to tax, but rather by granting special tax preferences, including

different exclusions for participating mutual policies, participating stock policies, and nonparticipating stock policies.

Since some of the income arising from participating policies is both unobservable and difficult to allocate among recipients, some degree of arbitrariness is inevitable. The current law formula, however, effectively bases the measure of income on variables, such as policyholder dividends, which have only a weak relationship to current actual income. A firm may wish to charge higher premiums simply to provide greater protection against highly unlikely events. It would find itself paying a higher tax than one insuring the same people against the same event, but simply charging lower premiums and rebating less redundant premiums as policyholder dividends.

Another difficulty with basing the income tax on a simple percentage of policyholder dividends is that the rule does not adequately take into account likely differences in company level income according to the mix of products offered. Thus, the rules for pension, health, disability, term life and permanent life policies are the same even though the underwriting income generated from each is likely to be different. Because the mix of products offered by life insurance companies differ both among companies and across time periods, any arbitrary rule unrelated to economic income will be inherently distortionary.

Alternative Tax Rules for Parity

***Imputation of Economic Income.*** One suggested approach to parity is to impute economic income to mutual companies. 37/ Such an imputation should raise taxable income up to the level of total economic income to be consistent with the theoretical basis on which all corporations are taxed.

37/ Henry Aaron makes this imaginative suggestion in The Peculiar Problem of Taxing Life Insurance Companies (1983).
When the equivalent of equity capital can be raised through premiums, it might be appropriate to impute economic income to all companies selling participating insurance policies, not just mutual companies. Stock companies are capable of raising capital in this form and paying some return on "equity" to participating policyholders. In this case, some stock companies selling a large number of participating types of policies might pay tax on an amount of imputed income similar to mutual companies.

The equity return of a mutual company could be based on an "equity base" times a rate of return on the equity. As is always the case with any imputation, difficult measurement problems arise. The base and the rate must be accurately and consistently estimated.

The conceptually correct base would be measured at market value; if book value is used, there must be some assurance that its relationship to market value does not vary widely across companies (e.g., through sales and repurchases of assets). The use of book value would discriminate against new firms in an inflationary economy because the ratio of their book to market value would be higher than that of existing firms.

The appropriate rate of return for the imputation of equity income would be a pre-tax or market rate of return. The rate should reflect the risk associated with the position of a shareholder rather than a creditor who has a prior claim in the case of bankruptcy. The imputed rate could be based on an average rate of return on equity of "comparable" corporations.

An imputation based on an average rate of return, however, would overcharge companies generating the smallest return on equity and undercharge those companies earning the highest return. If the imputation procedure were applied only to mutual companies, it is possible that overcharged companies would attempt to switch to stock ownership.
It is not obvious which firms would best represent "comparable" enterprises from which the rate of return should be measured. An average rate of return on stock life insurance companies raises problems of comparability because 1) some stock companies could earn high rates of return that would not necessarily accrue to mutual companies, and 2) some stock companies sell both participating and nonparticipating policies. If non-life insurance corporations are used to determine the rate, there may be difficult problems of measuring comparable equity bases.

Another difficulty with imputation methods is that companies could be perceived as paying tax on income never received. Low initial premiums and policyholder dividends can cause measured "losses" at the company level even though these losses may be effectively caused by distributions of equity income to participating policyholders.

A Variant. One variant of the imputed income approach would not impute all taxable income, but calculate total taxable income as an imputed amount, plus retained earnings, where retained earnings are defined as gain from operations less policyholder dividends. The imputed income would again equal a rate times the equity base. The imputed rate, however, would equal the difference between the average rate of return on the equity base of comparable companies (e.g., a group of stock life insurance companies) less the average rate of retained earnings (calculated as a percentage of the equity base) of mutual companies.

Since total retained earnings of mutual companies would already be subject to tax, the formula would insure that the total taxable income of mutual companies as a percentage of their total equity base is the same as the total taxable income of the comparable companies as a percentage of their total equity base.

38/ This type of approach is included in H.R. 4170 reported out of the House Ways and Means Committee on October 21, 1983.
For an individual mutual company, of course, total taxable income could be reduced by increasing policyholder dividends. However, the total taxable income of all mutual companies would not be affected by an increase in any one company's policyholder dividends, because the imputed income of all mutual companies would increase by the same amount.

This variant of the imputation approach might provide a better approximation of the distribution of economic income than imputation of total taxable income if retained earnings would be more highly correlated with actual economic income than would the equity base itself.

**Limits on Exclusions of Investment Income.** An alternative or complementary approach to taxation of mutual companies would be to limit the extent to which investment income can escape tax at both the company and individual level. Although returns to nonfinancial capital may never appear as receipts of a company, because of reduced premiums or policyholder dividends, total investment returns on financial assets are known. A cap could be set on the extent to which investment income could be excluded from tax at both the company and individual level. A minimum tax base would effectively be established for both mutual and stock companies.

If the cap or maximum exclusion were set at zero, no investment income could be exempted or deferred from taxation at the company or individual level. Alternatively, an exemption could be allowed for some maximum amount, such as 4 percent of reserve assets. 39/ Any investment income received by policyholders in excess of the exemption amount would be subject to tax. This tax could be collected at the individual level or

39/ The maximum exclusion could be tied to a real, rather than nominal, interest rate to prevent large changes in tax liability attributable to inflation.
by a proxy tax levied at the company level. If the tax exemption was sufficient to cover all investment income attributed to policyholders, then any excess over the maximum would be subject only to a corporate tax.

A company which returned investment income in the form of lower premiums or policyholder dividends would not be able to escape this limit; as company level income was reduced, the company would eventually hit the point at which no more investment income was excludable. A company which returned investment income in the form of higher interest credited to policyholders' savings accounts would eventually either pass some income on to policyholders in the form of taxable income or raise its own taxable income base.

There are several advantages to this approach. By applying both to stock and to mutual companies, no mutual company would be given an incentive to switch to stock form of ownership. The limit would apply to companies regardless of the way in which they return income to policyholders--as dividends, lower premiums or higher returns on policyholders' savings accounts. In addition, the tax base would vary with the actual success of the company in handling its investment portfolio.

This approach is also consistent with the taxation of income flowing through other financial institutions. The main advantage of mutual or participating ownership arises when income is not subject to tax at any level. Most income generated by other financial institutions is taxed at the individual level, corporate level, or both.

A major disadvantage of this approach is that it deals only with investment returns and not with all returns from the non-intermediation services or sales of the pure insurance component of policies. The returns from the nonfinancial capital of the company never show up as investment income.
To avoid the distortions from exempting from tax the income from non-financial capital, some other approach must be combined with a cap on the exclusion of investment income. For instance, once a minimum amount of investment income was required to be included, the imputation of a further return could be restricted to a base comprised of the value of buildings, plant and equipment. Less attention would need to be given to "surplus" composed of financial reserves. Those financial reserves would already be generating taxable investment income at either the company or individual level.

Excise Taxes. Excise taxes might be used to approximate the corporate income tax that would be collected on equity income. For instance, if the imputed return approach were used, but the surplus or base could not be measured easily on a company by company basis, excise taxes might be used to approximate the average result.

An excise tax might be assessed on the amount of insurance services. The value of insurance services theoretically could be measured from the receipts side of the ledger, that is, on the basis of premiums paid for pure insurance. However, it is difficult, if not impossible, to know what portion of premiums represents payments for insurance rather than redundant or excess premiums, and what portion of the cost of term insurance is covered by investment income earned on the policyholders' savings account. An alternative approach, therefore, would be to measure insurance services by the amount of insurance payments, rather than receipts, made in a given year. Total insurance payments could be approximated by total face amounts of insurance paid, minus the cash value of such policies.

Another excise tax might be assessed on the value of policyholders' savings accounts. This type of excise tax could be used as a means of imposing some minimum tax on investment
income. Different excise tax rates may be appropriate for the term insurance and savings account components of life insurance to account for probable differences in profit rates according to the service performed and the types of policies sold by different companies.

The advantage of excise taxes is that they at least can establish parity across companies performing similar functions. If the excise taxes are imposed on participating policies, the rate would not vary across mutual companies and would give no advantage to a mutual company converting to the stock form of organization. The tax base could not be manipulated by varying premiums, policyholder dividends, or returns on savings accounts.

The major disadvantage is that the tax would not be based upon the actual income of the company. A major question is therefore whether the value of insurance and investment services would be a better proxy for income and would cause less inefficiency than alternative attempts to measure, impute, or set minimum taxes on income. Some companies, for instance, could generate different amounts of economic income, but pay the same amount of excise tax.

Summary. Because not all income from participating life insurance policies is directly measured or observed, its taxation will involve some degree of arbitrariness. The three approaches listed above are all meant to limit that arbitrariness, while at the same time attempting to establish tax parity on economic income at both the individual and company level. Compared to present law, the suggested approaches are straightforward and more capable of amendment simply because they are understandable. If stock company income is measured correctly, then it would be much easier to adjust mutual company rates to avoid any egregious result.
V. ATTRIBUTION OF TAXABLE INCOME BY TYPE OF ACTIVITIES

As in the case of allocation of income between recipients, the attribution of net income by type of activity is important only when there are differences in tax rates among activities. When the attribution of income or costs between activities can affect tax liability, the tax system creates incentives to arrange financial affairs so that tax liability is minimized. Thus, taxpayers find it advantageous to attribute income to the activity with the lowest effective marginal tax rate and costs to the activity with the highest effective tax rate. Taxpayers may go to great lengths to rearrange their affairs to reduce their total tax liability even when there is no change in the economic substance of those affairs. Differential tax rates may occur across activities undertaken by a single company or group of affiliated companies, or they may occur across types of institutions or product lines.

A. Investment Versus Underwriting Income

Because life insurance companies generally include in taxable income at most one-half of the underwriting income and are allowed certain special deductions only against such income, the effective marginal tax rate on reported underwriting income is considerably less than that on investment income. 40/

Attribution of Costs

For most non-financial institutions, costs are fully deductible regardless of how they are allocated. As a result of the differential tax treatment of investment and underwriting income, however, life insurance companies have a strong incentive

40/ The effective tax rate on reported underwriting income would be no more than one-half that on investment income, if the excess is never distributed from the firms' "policyholders' surplus account".
to attribute as many expenses as possible to the cost of investment services rather than to the cost of underwriting services.

Because many costs are common to all activities, tax laws that create differential rates between activities typically contain complex or arbitrary rules requiring the matching of income and costs to specific activities. Such matching limits the amount of tax rate arbitrage. For instance, current statutes limit the amount of general expenses assigned as investment expenses to no more than one-fourth of one percent of total assets plus the amount of mortgage service fees. This limit is an arbitrary approach to a difficult administrative problem created by an equally arbitrary distinction between types of income.

Attribution of Gross Income

Recall that many mutual life insurance companies do not have any taxable underwriting income (gain from operations in excess of taxable investment income) due to their large amounts of policyholder dividends. Additional tax reduction could be obtained if they could convert investment income to underwriting income. Unused policyholder dividends (in excess of underwriting income) would then eliminate any tax on the increase in underwriting income. For some stock companies and mutual companies with underwriting income, a conversion of investment income to underwriting income would also reduce taxes because of the lower rate of tax on underwriting income.

Reinsurance agreements at one time became the key to this conversion. Prior to TEFRA, two life insurance companies could elect to report a modified coinsurance transaction for tax purposes as if the premium and investment income, as well as the
assets relating to the risks reinsured, were received directly by the reinsurer. However, no transfer of the assets actually occurred. Through the use of modified coinsurance agreements and the receipt of experience refunds, a ceding company with substantial investment income could nominally insure some of its risks and thus convert that income into underwriting income. The reinsuring company in turn would typically pay a deductible experience refund which offset its increased investment income. TEFRA repealed the special elective provision for modified coinsurance arrangements and eliminated comparable tax benefits from non-conventional coinsurance arrangements. 41/ Note, however, that by maintaining the differential between underwriting and investment income, the law maintains a strong incentive to find other arrangements to accomplish the same purpose.

Consolidated Returns

Another means of rearranging affairs to minimize taxes is through consolidation of tax returns. While only one-half of underwriting income is generally included in taxable income, underwriting losses can be offset dollar-for-dollar against investment income. This asymmetric treatment of underwriting gains and losses can affect the tax liability of an affiliated group of companies depending on how they consolidate their tax returns.

Affiliated companies can reduce tax liability in many instances by using the so-called "bottom-line" method of consolidation. The taxable income of each affiliated company

41/ For further details, see Joint Committee on Taxation, General Explanation of the Tax Equity and Fiscal Responsibility Act of 1982, p. 340-345.
is computed separately and then added together. In contrast, the so-called "phase-by-phase" method of consolidation aggregates taxable investment income and gain from operations of the entire group and then uses the aggregate tax base to determine total tax liability of the affiliated companies.

A simple example in Table 4 illustrates the tax arbitrage possible under the "bottom-line" method. Company 1 has taxable investment income of $200, but gain from operations of $100 due to reported underwriting losses of $100. Its total taxable income is equal to gain from operations of $100. Company 2 has taxable investment income of $200 and gain from operations of $300. Its total taxable income is $250 ($200 plus one-half of the $100 excess gain from operations over taxable investment income). Under the "bottom-line" method, the group's total taxable income is $350. The reported underwriting losses of the first company are allowed to offset dollar-for-dollar its investment income even though only one-half of the underwriting gains of the second company are included in taxable income. Under the "phase-by-phase" method, the group's taxable investment income, gain from operations and total taxable income would be $400. The reported underwriting losses of Company 1 must first be used to offset other underwriting income of the group before offsetting the more highly taxed investment income.

<table>
<thead>
<tr>
<th>Types of Taxable Income</th>
<th>Company 1 &quot;Bottom-line method&quot;</th>
<th>Company 2 &quot;Phase-by-phase method&quot;</th>
<th>Consolidated Company Income</th>
</tr>
</thead>
<tbody>
<tr>
<td>Taxable Investment Income</td>
<td>$200</td>
<td>$200</td>
<td>$400</td>
</tr>
<tr>
<td>Gain from Operations</td>
<td>100</td>
<td>300</td>
<td>400</td>
</tr>
<tr>
<td>Total taxable income</td>
<td>$100</td>
<td>$250</td>
<td>$400</td>
</tr>
</tbody>
</table>

$350
Despite the possibility of significant tax arbitrage through
the "bottom-line" method, TEFRA allows companies to use it to
determine consolidated life insurance companies' taxable income
until the end of 1983.

B. The Definition of "Life Insurance" and "Life
Insurance Companies"

Tax rules treat income flowing through both life insurance
products and life insurance companies differently from other
income. The rules create incentives for companies to design
their products or change their mix of business so that they or
their customers qualify for the most favorable set of rules. If
all investment income could be treated as annuity income, for
instance, all banks and thrift institutions would begin to label
their accounts as annuity accounts. To restrict access to
special tax preferences, therefore, additional rules must draw
lines among types of products and types of companies. Thus,
current tax law limits both what qualifies as a life insurance
product and what qualifies as a life insurance company.

Life Insurance Products

Because of the recent development and growth of highly
investment-oriented life insurance products, a definition of life
insurance qualifying for special tax considerations was
adopted in 1982. The definition places restrictions on "flexible
premium" contracts where the amount and timing of premium
payments are not fixed.

The 1982 approach established several tests to determine
whether a flexible premium policy qualifies for the favorable
treatment of investment income. Such benefits include deathtime
exclusion of investment income and liberal rules regarding borrowing and partial surrenders. Flexible premium policies which do not qualify may still benefit from the deferral of tax accorded investment income earned on annuity policies.

The tests employed involve limits on premiums paid and cash value buildup relative to the net single premium required, as well as minimum ratios of the policy's face amount to its cash value. This approach restricts qualifying insurance products according to various measures of the mix of insurance and investment components.

The minimum insurance-to-investment approach is a compromise from a direct approach of attributing investment income to policyholders and companies, and then allowing savings incentives to apply primarily at the individual level. The minimum insurance-to-investment approach does serve to restrict life insurance companies from selling pure investment products with tax advantages unavailable to products offered by banks, thrifts and other savings institutions. Its disadvantage is that the amount of tax preference for investment income is tied to the amount of insurance purchased; persons with equal amounts of investment income, but different amounts of insurance, pay different amounts of tax on that investment income.

Life Insurance Companies

A life insurance company is defined currently as a company that has at least 50 percent of its reserves held for life, annuity and health considerations. Pension reserves can generally be used to meet the 50 percent criterion, while health policies can be treated as life insurance products or property and casualty products. Because property and casualty companies also have various forms of tax preference not granted to other companies, the allocation of products and costs among affiliated companies, especially among subsidiary companies of a given parent, will often be done in a way that minimizes taxes paid.
The tax definition of a life insurance company is not tied to the tax definition of life insurance products. Nonqualifying "life" insurance products may be used to meet the 50 percent test. Some benefits of company level taxation may therefore be extended beyond qualifying life products to nonqualifying products sold by life insurance companies.

The definition of a life insurance company creates special problems when lower tax rates are applied to their economic income than to income of companies selling similar products. Because any numerical line is arbitrary, consolidations and reinsurance have been used to make income or products fall on the most advantageous side of the line.

VI. THE TIMING OF TAXABLE INCOME RECEIPT

A crucial, yet often ignored, element in the taxation of transactions flowing through life insurance companies is the treatment of expected future liabilities and reserves set aside for those liabilities. In an earlier paper, we presented several equivalent methods of accounting for future liabilities: the self-insurance cash method, the cooperative insurance method, and the qualified reserve method. 42/ Three rules are necessary to insure that the qualified reserve method is equivalent to the other two methods for tax, as well as other accounting, purposes. First, all income on qualified reserve assets must be counted as income when earned. Second, all withdrawals of qualified reserves must be included in the current year's taxable income. Third, calculation of additions to qualified reserves must be based on reasonable expectations of future contingencies for liabilities or losses. Improper accounting can result in the exemption, deferral or excessive speed-up of tax on some income, which in turn can affect the present value of taxes paid.

42/ See Neubig and Steuerle (1983), pp. 61-70, for details.
A. The Reserve Method of Accounting for Life Insurance Companies

Under current law, life insurance companies are allowed to deduct net additions to reserves established to pay for expected future liabilities arising from life insurance, annuity, and noncancellable health and accident insurance contracts. This method of accounting for expected future liabilities, which we have termed the "qualified reserve method," enables firms to take deductions immediately for additions to reserve funds rather than when the actual liabilities are paid. Current deductions for future liabilities, it is argued, are appropriate for life insurance companies because of the large amount of future liabilities that are expected to be met out of current receipts. The income averaging feature of qualified reserve accounting is also argued to be desirable, especially for new and rapidly growing firms. Moreover, to the extent that premiums are merely payments of capital into savings accounts of policyholders, a company level deduction treats such receipts similar to deposits of savings in other financial institutions.

The amount of reserves needed to cover expected future liabilities, including deposits in policyholders' savings accounts, depends on several factors. The needed reserves must cover the difference between the expected future payments (liabilities) and the expected future receipts (premiums net of loading expenses plus investment income earned on the reserves). The reserve calculation, therefore, will depend on the assumptions regarding the mortality distribution of policyholders, future interest rates, and the amount and timing of premiums paid net of loading expenses.
Interest Rate and Mortality Assumptions

The amount of reserves set aside by life insurance companies is in large part determined by the laws and regulations of States. The Internal Revenue Code states that reserves must be "computed or estimated on the basis of recognized mortality or morbidity tables and assumed interest rates" as required by State law. State laws require life insurance companies to set aside assets in certain types of investments and in amounts no less than their reserve liabilities. The required amount will be smaller if reserves are assumed to grow faster through investment, i.e. through a higher assumed interest rate earned on the reserve assets.

The purpose of these State laws is to protect policyholders against the possible insolvency of a company when it becomes obligated to pay out death benefits or cash values. The State laws are not intended or designed to calculate economic income or income for tax purposes. If insurance companies were to reduce reserves by using a current or more realistic interest rate assumption, their financial condition could become less secure and more susceptible to cyclical, as well as permanent, changes in the economy. State laws therefore impose limits on the maximum assumed interest rates employed by life insurance companies in computing reserves. Although there has been a significant rise in market interest rates over the last three decades, assumed interest rates have not risen as fast and typically still range between 3 percent and 4-1/2 percent for permanent life policies. In addition, State laws generally require the use of outdated mortality rate assumptions in calculating required reserve amounts. Often, companies use higher interest rates and more realistic mortality assumptions to price their policies. For tax purposes, however, companies may use even more conservative assumptions, i.e. lower interest rates and less current mortality assumptions, than those required by State law.
Conservative interest rate and mortality assumptions increase the amount of deductions for additions to reserves above what is necessary to measure annual economic income correctly. Deferral of tax liability is one result of tax rules which allow deductions for additions to reserves on the basis of conservative assumptions. The present value of reserve deductions for the whole-life policy described in Section I with different interest rate and mortality assumptions (as well as methods of treating certain receipts and expenses, discussed below), are presented in Table 5.

Before proceeding, it should again be made clear that the incorrect accounting of income for tax purposes does not imply that there should be a change in State laws established for a completely different purpose. There may be good reasons for States to require reserves in excess of expected liabilities. The greater the amount of the reserves, the safer is the investment of the policyholder. The soundness of his insurance investment, as well as the insurance company, is increased. Tax accounting, however, serves a completely different purpose. Whenever income flowing through particular companies is taxed differently than income flowing through other companies, the flow of funds to different sectors and through different intermediaries is made less efficient. Another principle of tax law—that persons or companies with equal incomes should be taxed equally—is also violated.

Current tax deductions for additions to qualified reserves should be based on reasonable expectations of the present value of future contingencies as determined by up-to-date mortality and interest rate assumptions. If State regulatory agencies want life insurance companies to set aside additional assets for the protection of the policyholders, there would be no limit on the amount of funds placed in nondeductible nonqualified reserve accounts. One qualification is that losses or liabilities should be treated for tax purposes as being paid first from qualified accounts.
Table 5

Present Value of Deductions for Additions to Life Insurance Reserves with Different Valuation Methods and Assumptions for a Hypothetical Policy 1/
(Discounted at 6 Percent)

<table>
<thead>
<tr>
<th>Method of Valuation</th>
<th>Interest Rate and Mortality Distribution 2/</th>
<th>3 Percent</th>
<th>4.5 Percent</th>
<th>6 Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Net level premium</td>
<td>$27,268 $26,288 $24,556 $23,483 $22,232 $21,102</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Preliminary term method (PTM) 3/</td>
<td>26,255 25,333 23,737 22,723 21,568 20,498</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PTM with approximate revaluation 4/</td>
<td>27,548 26,644 25,078 24,084 22,951 21,901</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Graded PTM 5/</td>
<td>26,885 25,932 24,253 23,206 21,990 20,886</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Graded PTM with approximate revaluation</td>
<td>28,167 27,232 25,585 24,557 23,365 22,282</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cash surrender value 6/</td>
<td>26,080 25,178 23,581 22,588 21,424 20,374</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

1/ Hypothetical policy is for a level death benefit of $100,000 with level annual premiums starting at age 35 until endowment at age 95. Present value calculation assumes that the policy is outstanding until endowment. Relative differences between the cells would be greater for policies that end before endowment due to death of the insured or surrender.

2/ Commissioner's Standard Ordinary (CSO) mortality distribution table.

3/ PTM reserves reach the amount of net level premium reserves at end of the premium paying period.

4/ Approximate revaluation formula adds $19 per $1,000 of the face amount minus $0.019 per dollar of outstanding reserves.

5/ Assumes graded PTM reserves reach the amount of net level premium reserves after 15 years.

6/ Cash surrender value calculation assumes loading expenses of 50% of initial premium and 10% of the 2nd-10th year premiums.
Assumption of Amount and Timing of Expenses

A third assumption used to calculate reserves is the schedule of future premium payments net of the company's loading expenses. Loading expenses can vary greatly between companies and across types of policies. The Tax Code allows life insurance companies to calculate reserves by either the net level premium method or by a preliminary term method. The net level premium method assumes that a constant net premium each year over the premium-paying period of the policy is used to pay current mortality charges and to fund reserves. Loading expenses are treated as if they are spread over the entire term of the policy. In contrast, the preliminary term method assumes that all loading expenses are covered by the first year's premium. The preliminary term method, therefore, allows lower additions to reserves in the first year and higher additions in later years than the net level premium method. Actual loading expenses, however, may be greater or less than the amount of the first year's premium assumed under the preliminary term method. Modified preliminary term methods often assume that loading expenses are a fraction of the premiums received during the initial years of the contract.

Many companies prefer to calculate their actual reserves with a preliminary term method for regulatory and financial reasons. This method produces a larger company surplus in the initial years and may increase the volume of insurance that can be written under State law. Under the net level premium method, the required addition to reserves plus the first-year loading expenses may be greater than the first year's premium. Unless the required addition to reserves is reduced in the first year by using a preliminary term method, a company may have to pay the difference out of its surplus.

Firms using a preliminary term method for their financial and regulatory reporting are currently allowed to revalue their reserves on a net level premium basis for tax purposes. Many
firms take advantage of this tax provision. Because the net level premium method calculates larger additions to reserves for tax purposes in the early years, revaluation can be used to speed up deductions for future liabilities by allowing deductions for reserves not even set aside.

Firms not only are allowed to revalue their tax "reserves", but can also use an approximate method to do so. The approximate revaluation method assumes that the difference between the amount of reserves computed under a preliminary term method and the net level premium method are $19 per $1,000 of new insurance. This assumption usually overstates the amount of reserves needed under the net level premium method, especially if reserves for State purposes are computed under a modified preliminary term method.

Accurate accounting for economic income requires that current deductions for additions to reserves be based on reasonable estimates of the amount and timing of net premiums. The net level premium method assumes for reserve purposes that the loading costs are amortized over the life of the policies at the same time that current deductions for these expenses are claimed. If the net level premium method is used to calculate reserves, consistent accounting would require that expenses associated with life insurance policies be amortized over the expected life of the policies. The preliminary term method normally provides a closer approximation of the actual flow of receipts from premiums less loading charges. This method assumes that all loading expenses are paid out of the initial year's premium, an assumption whose accuracy depends upon the actual amount and timing of payment of loading expenses.

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44/ Some firms may not revalue to a net level premium basis if they expect that the additional deductions will generate losses from operations that will expire unused before the end of the applicable carryforward period. In addition, companies are required to revalue all reserves computed on a preliminary term basis. As a consequence they may lose future deductions for additions to reserves on old policies if they elect to revalue.
Neutrality would require that the appropriate reserve deduction be the same irrespective of the method of calculation. Revaluation of reserves would then be unnecessary. If the Tax Code, nonetheless, continues to rely on State laws which allow reserves to be calculated under either method, then at least two restrictions could be imposed on revaluation. Revaluation of reserves from a preliminary term basis to a net level premium basis could be allowed, first, only if the exact revaluation method is used, and, second, only if loading expenses are amortized. The approximate revaluation method, like all methods which purport to work out well for some average policy, ends up producing unintended distortions for different policies and reserve methods. Even if the revaluation method had been accurate when initially put into the law, it can be quite inaccurate in a world of competing financial institutions and in which new types of insurance policies and savings instruments constantly are being offered.

Tax Treatment of Income Earned on Reserves

Our rules for accurate accounting of reserves also require that all investment income earned on reserve assets should be subject to tax to the ultimate owner of those reserves. Many reserves may be viewed as belonging to the company (and its equity owners) and such income would normally be subject to tax in the same manner as the income of other companies. Life insurance companies, however, currently obtain additional exemption through an understatement of their portion of investment income, as discussed in section II.

Other reserves may be viewed as belonging to the policyholder and similar to a savings account. In this case, a deduction of the interest at the company level may be desired because the policyholder is viewed as either a creditor or a mutual owner deserving some amount of pass-through treatment. If, however,
the individual also does not recognize the income, then the
deduction of investment income earned on the reserves results in
tax exemption or deferral of the investment income. Contrast
this deferred or non-taxed income, for instance, with the taxable
pass-through income of an investor in a mutual fund or in a
savings account at a bank.

One means of restoring neutrality between earnings on life
insurance reserves and earnings on other investments would be to
allow deductions at the company level for investment income only
if that income were credited to policyholders and treated
similarly to other investment income at the individual level.
This would insure that any company level investment income from
reserve assets received the same tax treatment as other company
income earned on non-reserve assets. At the same time, it would
prevent life insurance reserves from becoming a mechanism at the
individual level for tax preferences unobtainable when similar
investments are purchased through other financial intermediaries.

We again note that we are not commenting on the general
desirability of savings incentives. Such incentives could be
provided at the individual level based upon all savings or all
income from capital. Selective incentives, however, create
inequities among persons with equal incomes and equal amounts of
savings, misallocation of funds, and inefficiency within and
among financial institutions.

**Periodic Recapture of Excess Deductions**

A final rule necessary under the qualified reserve method of
accounting is that the value of excess deductions should be
recaptured on a timely basis. If reserves are properly
maintained and accounted for separately from the firm's other
assets, excess reserves can be identified. Periodic withdrawals
or additions to reserves, based upon current interest rates, mortality distributions, and market values of assets and liabilities, would be a realistic means of correcting for differences between expected and actual reserves.

One difficulty that is raised by a requirement for periodic re-estimation is that financial accounting does not normally reflect changes in the market values of assets. Revisions of estimates of the present value of liabilities would generally require similar adjustments on the asset side of the ledger. This problem should not be allowed to deter efforts to tax the build-up of excess qualified reserves. Economic gains and losses on assets can easily be recognized by companies; the simple process of selling an old asset and reinvesting the proceeds in a new asset allows a company to convert the basis value of assets to current market prices. The problem of eliminating cyclical fluctuations in gains and losses, therefore, should not allow a firm to treat as non-excess, say, a liability certain with a book value of $300 backed by a bond with a market value of $500.

B. An Alternative Method of Computing "Tax Reserves" for Life Insurance Companies

The preceding discussion outlined the current deviations from the proper qualified reserve method of accounting and several changes necessary to measure accurately the income flows of life insurance companies. Many changes, including revaluations of assets and liabilities, are needed to insure equivalence of the qualified reserve method with other methods of accounting for future liabilities. Fortunately, there is an alternative method of achieving this equivalence. This method would require that the insurance and other non-investment components be accounted separately from the investment component in each life insurance policy, and that the cost of services and value of savings be
stated explicitly. The investment component would be reflected in a savings account for each policyholder equal in value to the cash surrender value of the policy. At the company level, a deduction for an increase in outstanding policies' cash surrender value would be allowed. The increase would be due either to deposits from premiums or interest credited to the accounts. We will call this procedure the "insurance deposit" method.

Life insurance companies would deduct additions to "reserves" in accordance with increases in the value of policyholders' savings accounts. The premium payment and interest on the existing account together cover the cost of the term insurance policy and the amount of new deposits (or redeposits of interest) in the policyholders' savings accounts. These deposits are liabilities of the company, not income. Therefore, the amount of the deposit should be excluded from gross income of life insurance companies, just as deposits are excluded from the gross income of other depository institutions. Because total premiums are included in taxable income of insurance companies, a deduction would be allowed for the amount of deposits in the year in which they are made. Additional qualified reserves would be needed only to cover the liabilities for term insurance expected to occur during that year.

Under this method, the amount of the "deposits" held by an insurance company would equal the cash surrender value of its policies. In any given year, the total cash surrender value would increase by the amount of new deposits plus investment earnings credited to policyholders, minus withdrawals of cash value upon surrenders and cancellations. The net change in total deposits would be equal to the change in cash surrender value of all policies.
For a stock insurance company, income, \( Y_t^C \), is equal to total premiums received, \( P_t^C \), plus total investment income, \( II_t^C \), less the amount paid out to policyholders either as face amount of policies or as policyholder dividends, \( F_t^C \), less the change in the total amount of deposits or cash surrender value (including accumulated interest earnings), [\( CSV_t^C - CSV_{t-1}^C \)], held for policyholders by the company, less other expenses, \( L_t^C \):

\[
3) Y_t^C = P_t^C + II_t^C - F_t^C - [CSV_t^C - CSV_{t-1}^C] - L_t^C
\]

For participating policies of mutual and stock companies, some additional amount of tax might be levied or income might be imputed according to rules discussed in section IV.

The premium, \( P_t^i \), of each individual policyholder, plus his investment income, \( II_t^i \), might be viewed as allocated to the cost of term insurance, \( E_t^i \), plus the change in cash surrender value of his savings account, [\( CSV_t^i - CSV_{t-1}^i \)], as shown in equation 4. Individual level income will equal the amount of investment income attributed to each account, just as with a normal savings account at any other depository institution.

\[
4) P_t^i + II_t^i = [CSV_t^i - CSV_{t-1}^i] + E_t^i
\]

Individual level income might be understated if the company were willing to lower investment income and the cost of the insurance simultaneously. This problem, however, can be minimized or eliminated through several methods. First, once the cost of services and values of savings are stated explicitly the company would be required to sell the term insurance at the same cost to all customers in the same actuarial category, regardless of whether they purchase it as part of a permanent insurance policy or not. If the company lowered the cost of the insurance much below the premiums paid for term insurance only, it would force the permanent insurance policyholders to subsidize the term insurance policyholders. Second, if investment income on term policies were also to be made subject to tax, prepaid term
premiums could be required to be put in the deposit account. Investment income could then be credited and insurance costs deducted from this account on a frequent basis, say, monthly. This is perhaps the purest solution, for it cleanly separates the investment function from the insurance function of the company. Each premium in effect is a deposit in an account, and withdrawals are made from the account on a frequent basis to purchase term insurance. As suggested in section IV, a final means of minimizing the extent to which investment income can be understated is simply to require that total taxable company level plus individual level income not be allowed to fall below total investment income, or total investment income less some maximum excludable amount.

The proposed "insurance deposit" method eliminates the problems of estimating expected future interest rates, mortality rates and the net premiums of different policies issued by different companies. It would be unnecessary to measure the market value of reserves or recapture excess deductions where the earlier estimates were inaccurate. In fact, the "insurance deposit" approach allows the identical present value of "reserve" deductions as the preliminary term and net level premium methods when actual yields equal the assumed yields and the pattern of net premium payments is identical to the patterns implicitly assumed by the two methods.

Although the "insurance deposit" method is suggested here as a means of dealing with the difficult question of reserves, it also helps solve many of the problems discussed in previous sections. The investment income of each policyholder would be stated in the contract, thus providing an easy means of making any tax incentives for investment income apply equally at the individual level. Except for the imputation of a return on nonfinancial capital for companies selling participating policies--a difficult issue in any case -- company level income would be calculated correctly on a current basis. Finally, practically all of the problems created by separate tax rates on underwriting and investment income would be eliminated.
BIBLIOGRAPHY


