

UNDERSTANDING ANNUITIES



Presented by
The Kansas Insurance Department
Sandy Praeger, Commissioner

WHAT IS AN ANNUITY ?

- a. Insurance Contract issued by an Insurance Company.
- b. Premium(s) paid under the contract accumulate interest or earnings on a tax-deferred basis.
- c. A systematic retirement income payment, the size and duration of which depends on the pay-out option selected, premium(s) paid & earnings.



Did You Know?

The average American spends 18 years in retirement and less than half of Americans have put aside money specifically for retirement.



ANNUITY BENEFITS

- a. Retirement Income Benefit
- b. Withdrawal Benefits
- c. Free Withdrawal Benefits
- d. Death Benefits

ANNUITY DESCRIPTIONS

- 1) **How premiums are paid**
- 2) **When benefit payments begin**
- 3) **How interest is determined**
- 4) **Tax status**

ANNUITY DESCRIPTIONS

How Premiums Are Paid

- a. Single Premium contracts allow only one premium to be paid, or allow premiums to be paid for only 1 year from time of purchase.
- b. Flexible Premium contracts allow owner to add additional premiums to the contract during the year.

ANNUITY DESCRIPTIONS

When Benefit Payments Begin

- a. Immediate annuities provide income that begins shortly after you pay the premium.
- b. Deferred annuities provide income that begins at a later date.

ANNUITY DESCRIPTIONS

How Interest is Determined

- a. Fixed Annuities
 - 1. Fixed Rate
 - 2. Indexed Rate
- b. Variable Annuities

ANNUITY DESCRIPTIONS

How Interest is Determined

- a. Fixed Annuities
 - 1. Fixed Rate - Insurance Company declares an interest rate to be credited each year.
 - 2. Indexed Rate - Formula specified in the contract that determines interest rate based on an index like S&P 500, Dow Jones, Russell 2000.

ANNUITY DESCRIPTIONS

How Interest is Determined

- b. Variable Annuities – Interest is determined by the growth in the underlying separate accounts. Growth may be Positive or Negative.

ANNUITY DESCRIPTIONS

Tax Status

- a. Qualified – Premium(s) paid into the annuity contract are tax deductible [401(k), 403(b), 408(b) IRA].
- b. Non-qualified – Premium(s) paid into the annuity contract are not tax deductible.

Qualified Example

Salary = \$100,000
Annuity Premiums = \$10,000
Taxable Income = \$90,000
Tax Rate = 25%
Taxes = \$22,500
After Tax Income = \$77,500
Net Income = \$67,500

Non-Qualified Example

Salary = \$100,000
Annuity Premiums = \$10,000
Taxable Income = \$100,000
Tax Rate = 25%
Taxes = \$25,000
After Tax Income = \$75,000
Net Income = \$65,000

EXAMPLES OF ANNUITY DESCRIPTIONS

- a. Qualified Single Premium Immediate Variable Annuity
- b. Non-qualified Flexible Premium Deferred Equity Indexed Annuity
- c. Non-qualified Single Premium Deferred Fixed Annuity

WHERE DO I PURCHASE AN ANNUITY ?

Annuities may be purchased from an Insurance company through:

Licensed Insurance Agent



Internet



Bank



Direct Mail



PARTIES TO THE ANNUITY CONTRACT

- 1. Insurance Company
- 2. Owner of Contract
- 3. Annuitant
- 4. Beneficiary

PARTIES TO THE
ANNUITY CONTRACT

Insurance Company

- a. Issues the Annuity Contract.
- b. Invests the Premium(s).
- c. Credits Interest Earnings.
- d. Pays the Benefits/Withdrawals.
- e. Keeps Account of Contract Values.

PARTIES TO THE
ANNUITY CONTRACT

Owner

- a. Controls all rights under the Contract.
- b. Pays Premium(s).
- c. Names the Annuitant.
- d. Names the Beneficiary.
- e. Owner and Annuitant can be same.
- f. Joint Owners Allowed.

PARTIES TO THE
ANNUITY CONTRACT

Annuitant

- a. Person insured under the Contract.
- b. Age and sex determines Income Benefits.
- c. Person to whom Income Benefits paid.

**PARTIES TO THE
ANNUITY CONTRACT**

Beneficiary(s)

- a. Receives death benefit on death of Annuitant or Death of Owner.
- b. There may be multiple beneficiaries, (ie. children, etc.).

**WHAT ARE THE COSTS OF
PURCHASING AN ANNUITY?**

Insurance Company Expenses Include:

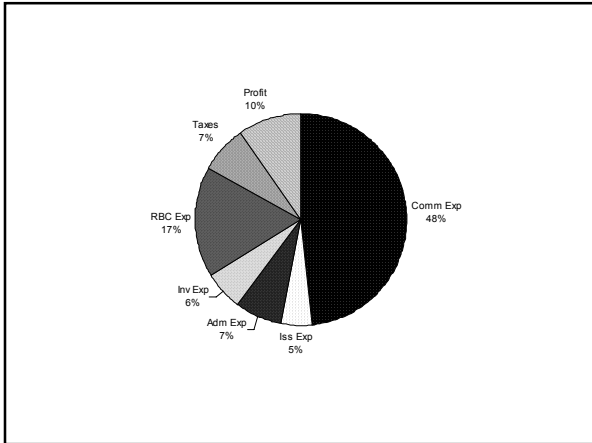
- a. Agent Commission
- b. Issue Expense
- c. Administration Expense
- d. Investment Expense
- e. Risk Based Capital Expense
- f. Taxes (State & Federal)
- g. Profit (After Tax)

Agent Commission (% of Initial Premium)

- a. Immediate Annuities – 1% to 5%
- b. Deferred Fixed Annuities – 5% to 15%
- c. Deferred Variable Annuities – 5% to 8%

Other Company Expenses
All Expenses Except Commissions
Present Value of Expenses to Premium (%)

Issue Expense –	1.00%
Administration Expense –	1.50%
Investment Expense –	1.20%
Risk Based Capital Expense –	4.00%
Taxes –	1.00%
Profit –	<u>2.00%</u>
Total Other Company Expenses	10.70%



HOW ARE THE COSTS OF AN ANNUITY PAID FOR ?

Insurance Company recovers expenses by charging any or all of the following:

- a. Interest Rate Spread
- b. Contract Charges
- c. Surrender Charges



Interest Rate Spread

Difference between the rate of interest the company earns on investments and the interest rate credited on the annuity contract.

Example:

*Company earns 8.50% on the investments.

*Credits 5.75% on the annuity premiums.

Spread = 2.75% (8.50% - 5.75%)

Contract Charges

One time or periodic flat dollar charges.

Example:

\$ 50 issue fee

\$ 30 annual administrative fee

Surrender Charges (Withdrawal Charges)

- a. Percentage amounts applied to any withdrawals from the annuity contract.
- b. Charges apply for a fixed number of contract years and decrease over time.
- c. Charges are subject to Kansas Law.

Surrender Charge Example

Contract Year	Surrender Charge Percent
1	12%
2	11%
3	10%
4	9%
5	8%
6	7%
7	6%
8	5%
9	4%
10	2%
11 +	0%

HOW IS THE INTEREST RATE SPREAD DETERMINED ?

Total Expenses are amortized over the expected life of the annuity contract.

Example:

Commissions 10.00%
 Other Company Expenses 10.70%
 Total Company Expenses 20.70%

HOW IS THE INTEREST RATE SPREAD DETERMINED ?

Total Company Expenses = 20.70%

Actuarial Amortization Factor = 7.515

Spread = $20.70\% / 7.515$

Spread = 2.75%

Are Surrender Charges Really Necessary ?

Rationale:

A Company incurs commission and issue expenses up front. If the annuity contract owner surrenders or terminates the contract prior to the end of the 7.5 year period, the company has not received enough spread to cover the upfront costs.

Are Surrender Charges Really Necessary ?

Example:

Commissions	10.00%
Issue Expenses	<u>1.00%</u>
Up Front Expenses	11.00%
Spread in First Year	<u>2.75%</u>
Short-fall	8.25%

ANNUITY CONTRACT TERMS

Contract Date

The date annuity contract becomes effective. (Issue Date)

Annuity Date

The date benefit payments are scheduled to begin. (Maturity Date)

ANNUITY CONTRACT TERMS

Right to Change the Annuity Date

Some contracts allow the owner to change the Annuity Date prior to benefits being paid, others do not.

ANNUITY CONTRACT TERMS

Free Look Period

- a. The period of time you have to examine and review the Contract and, if necessary, return it to the Company requesting that it be canceled and that your premium be returned.
- b. For Variable annuities you will get any Premium allocated to a fixed account returned plus the value of the Separate Accounts.

ANNUITY CONTRACT TERMS

Account Value

- a. The amount of money in your Annuity Contract.
- b. The sum of your Premium(s) plus Interest earnings less any withdrawals and contract charges.
- c. Also referred to as Accumulated Value, Cash Value, or Accumulation Value.

ANNUITY CONTRACT TERMS

Cash Surrender Value

- a. The value you will receive if you surrender or terminate your contract prior to the Annuity Date.
- b. Equal to the Account Value less any Surrender Charge applied at the time of surrender.

ANNUITY CONTRACT TERMS

Cash Surrender Value

- c. Can never be less than the Guaranteed Minimum Values.
 - ❖ This is mandated by Kansas Law.
- d. Equal to the Account Value after the end of the Surrender Charge Period.

ANNUITY CONTRACT TERMS

Surrender Charges

- a. Charges applied on withdrawals from your Annuity Contract.
- b. Percentages applied to Account Value (Decrease to 0 over time).
- c. Limited by Kansas Law.

ANNUITY CONTRACT TERMS

Withdrawals

- a. Prior to the the Annuity Date.
- b. Minimum amount that may be withdrawn.
- c. Limited the number of withdrawals in a calendar or contract year.
- d. Minimum amount must remain in the Account.
- e. Amount that can be withdrawn is the Account Value.

ANNUITY CONTRACT TERMS

Free Withdrawals

- a. Amounts that may be withdrawn from the annuity contract without surrender charge.
- b. May be limited in amount, number and timing.

ANNUITY CONTRACT TERMS

Common Free Withdrawal Provisions

- a. Interest Only.
- b. Any amount up to 10% of Account Value.
- c. Interest only up to 10% of Account Value.
- d. 10% of Premium each Contract Year.

ANNUITY CONTRACT TERMS

Death Benefit

- a. Paid on death of Annuitant or Owner.
- b. Equal to the Account Value or the Cash Surrender Value.
- c. Beneficiary decides ...
 - ❖ Paid in lump sum, or
 - ❖ Paid out over a period of years.
- d. Minimum Death Benefit = Cash Surrender Value (Kansas Law).

ANNUITY CONTRACT TERMS

Death Of Owner and IRC Section 72(s)

- a. Owner dies prior to Annuity Date, Owner's entire interest in contract must be distributed within 5 years of the Owner's death.
- b. Owner's interest = Cash Surrender Value if death benefit paid on Annuitant's death.
- c. Owner's interest = Death Benefit if death benefit paid on Owner's death.

ANNUITY CONTRACT TERMS

Exceptions to Section 72(s) Death of Owner

- a. If the owner has named spouse as beneficiary, spouse becomes owner of Annuity Contract and no distribution required.
- b. Distribution is required on death of spouse, even if spouse remarries.

ANNUITY CONTRACT TERMS

Exceptions to Section 72(s) Death of Owner

- c. If the Owner has named a non-spousal beneficiary, that beneficiary may take the distribution over a period of time not to exceed the life expectancy of the beneficiary.
- d. Payments must begin not later than one (1) year after the Owner's death.

ANNUITY CONTRACT TERMS

Annual Statements

- a. Owner receives statement at least once per year.
- b. Shows values of the contract.



ANNUITY CONTRACT TERMS

Pay-Out Options (Settlement Options)

- a. A method of distribution of retirement income benefits.
- b. Option selected will determine the amount of the retirement benefit and length of time benefit will be paid.
- c. Deferred annuity becomes an immediate annuity under a Pay-Out option.

ANNUITY CONTRACT TERMS

Pay-Out Options

- d. Owner must elect a pay-out option prior to the annuitant's death and prior to the annuity date.

- e. Owner may designate a payee.

- f. Options are described in the Annuity Contract.

ANNUITY CONTRACT TERMS

Pay-Out Options

- g. Once retirement benefits start under a pay-out option, the pay-out option cannot be changed.

- h. The Annuity Contract guarantees minimum pay-out factors.

- i. Payment Mode may be selected (monthly, quarterly, semi-annually, annually).

ANNUITY CONTRACT TERMS

Pay-Out Options

- j. On Annuity Date, Company calculates benefit payment. Factors used cannot be less than guaranteed minimum pay-out factors stated in the Contract.

- k. Benefit payment is guaranteed and cannot change (unless variable pay-out).

ANNUITY CONTRACT TERMS

Common Pay-Out Options

- a. Life Income
- b. Life Income with Period Certain
- c. Joint and Last Survivor
- d. Joint and Last Survivor with Period Certain
- e. Fixed Period Certain



ANNUITY CONTRACT TERMS

Life Income

- a. Payee will receive retirement income payments for as long as the Annuitant is alive.
- b. Payments stop when the Annuitant dies.

ANNUITY CONTRACT TERMS

Life Income With Period Certain

Payee will receive retirement income payments for the longer of (a) and (b) where:

- ❖ (a) Annuitant's lifetime
- ❖ (b) Period Certain (5, 10, 15, 20 years)

ANNUITY CONTRACT TERMS

Joint and Last Survivor

- a. Payee receives retirement income payments until the death of the last survivor of the lives insured.

- b. Two payment variations
 - ❖ Joint and 2/3 Survivor
 - ❖ Joint and 1/2 Survivor

ANNUITY CONTRACT TERMS

Joint and Last Survivor With Period Certain

Payee will receive retirement income payments for the longer of (a) and (b) where:

- ❖ (a) Last Survivor's lifetime
- ❖ (b) Period Certain (5, 10, 15, 20 years)

ANNUITY CONTRACT TERMS

Fixed Period Certain

- a. Payee receives payments for the fixed period (5, 10, 15, 20 years).

- b. Payments will be made for the fixed period whether the annuitant lives or dies during the fixed period.

ANNUITY CONTRACT TERMS

Pay-Out Options Require Careful Planning

- a. Select payee(s) carefully.
- b. Payee does not have to be the annuitant or the owner.
- c. Designate beneficiary should payee die.

ANNUITY CONTRACT TERMS

Interest Earnings Crediting Methodology

- a. Varies by product type:
 - ❖ Fixed, Index or Variable.
- b. How interest credits are determined must be defined in the Annuity Contract.

THE ANNUITY CONTRACT

Page 1 of the Contract (Face Page)

- a. Company Name & Address.
- b. Description of Annuity.
- c. Policy Form Number Lower Left Corner.
- d. Benefits Provided for Premium(s) paid.
- e. Notice of 10 Day Free Look.
- f. Legal Contract – **READ CAREFULLY!!!**



THE ANNUITY CONTRACT

Page 2 of the Contract

Contains an index of all of the Contract provisions for easy page reference.

THE ANNUITY CONTRACT

Page 3 of the Contract

- a. Called Schedule Page or Data Page.
- b. Contract (Policy) Number.
- c. Contract Date & Annuity Date.
- d. Owner & Annuitant Information.
- e. Initial Premium Paid.
- f. Contains interest rates, guarantees, surrender charges, contract charges.

THE ANNUITY CONTRACT

Page 4 of the Contract

- a. Table of Guaranteed Minimum Values.
- b. Shown for minimum of 20 years.
- c. You will never receive less than the amounts shown.
- d. Minimum values Kansas Law.
- e. Not Required for Variable Annuities.

ANNUITY CONTRACT TERMS

Interest Earnings Crediting Methodology

- a. Varies by product type:
 - ❖ Fixed, Index or Variable.
- b. How interest credits are determined must be defined in the Annuity Contract.

INTEREST EARNINGS CREDITING METHODOLOGY

Fixed Annuity

1. Company declares an interest rate to be credited to the Contract.
2. Interest rate typically guaranteed not to change for at least 1 Contract Year.
3. Some Fixed Annuities are multi-year rate guarantee products.
 - ❖ Example: interest rate may be guaranteed for a period of 5 years.

INTEREST EARNINGS CREDITING METHODOLOGY

Fixed Annuity

4. Most Contracts specify a minimum guaranteed interest rate.
5. Many Contracts pay a bonus interest rate in Contract Year 1.
6. Bonus Interest could be anywhere from 0.25% to more than 5.00%.

INTEREST EARNINGS CREDITING
METHODOLOGY

Indexed Annuity

1. Credited interest rate is based on an index and not declared by the Company.
2. Credited interest rate is determined by a formula stated in the Annuity Contract.
3. Formula determines how the change in the Index is calculated.

INTEREST EARNINGS CREDITING
METHODOLOGY

Indexed Annuity

4. Index may be an Equity Index, Bond Index or other type of Index.
5. Some Indexed Annuities have multiple Index Accounts.
6. Formula states how the index rate (interest rate) is determined.

INTEREST EARNINGS CREDITING
METHODOLOGY

Indexed Annuity

7. Formulas may involve participation rates and index spreads (interest spreads).
8. Contract may state minimum participation rates and maximum index spreads.
9. Formulas will state the change in the Index is determined.

INTEREST EARNINGS CREDITING
METHODOLOGY

Indexed Annuity

10. Most common Index Annuity is the Equity Index Annuity.
11. Most common Index is the Standard & Poor's 500 (S&P 500).
12. Two common formulas are the Point-to-Point formula and the Monthly Average formula.

INTEREST EARNINGS CREDITING
METHODOLOGY

Variable Annuity

1. Allow owner to allocate premium into various sub-accounts.
2. Sub-account is an ownership interest in an underlying fund (i.e. it is an investment).
3. Sub-accounts are valued every day the stock market is open for trading.

INTEREST EARNINGS CREDITING
METHODOLOGY

Variable Annuity

4. The market value of a Sub-Account is called the Net Asset Value.
 - ❖ Net Asset Value divided by the total number of shares is called the Net Asset Value per share.
5. When premium is allocated to a Sub-Account, a certain number of units are purchased based on the Net Asset Value per share at the time of purchase.

INTEREST EARNINGS CREDITING
METHODOLOGY

Variable Annuity

- 6. The market value of the Sub-Account can increase or decrease. Therefore there is no guarantee of Premium or Principle.

- 7. Each day the Sub-Account Value is the number of units times the value per unit.

INTEREST EARNINGS CREDITING
METHODOLOGY

Variable Annuity

- 8. The value per unit may be adjusted by a daily Mortality and Expense (M&E) fee, also called an Actuarial Risk Fee.
 - ❖ covers the company's expenses and any guaranteed benefits provided by the company.

- 9. Investment Expenses are deducted prior to determining the value per unit.

INTEREST EARNINGS CREDITING
METHODOLOGY

Variable Annuity

- 10. The Account Value of a VA Contract is the sum of the values of all of the Sub-Accounts.

- 11. Most VA Contracts offer a fixed account (General Account) investment option.
 - ❖ This account works just like a fixed annuity and will have a credited interest rate declared by the Company.

INTEREST EARNINGS CREDITING
METHODOLOGY

Variable Annuity

- 12. Because the value of the Sub-Account is determined at market each day, there is no interest rate or interest earnings to be calculated or credited.
- 13. Variable Annuity is a security and is regulated by the Securities and Exchange Commission (SEC) and the State Insurance Department.

INTEREST EARNINGS CREDITING
METHODOLOGY

Variable Annuity

- 14. SEC regulates investment components, agent license and sales requirements, and mortality and expense fees.
- 15. A prospectus is required to be delivered to the prospective buyer of a VA.

In Summary



Fixed Deferred Annuity

Pros

- a. Simple Interest Crediting Methodology.
- b. Principle Protected Minimum Guaranteed Contract Values (SNFL).
- c. Contract may guarantee a minimum credited interest rate.

Fixed Deferred Annuity

Cons

- a. Crediting Rate declared at discretion of Company.
- b. Interest Rate Spread not disclosed.

Index Deferred Annuity

Pros

- a. Interest rate is tied to Index and not declared at discretion of Company.
- b. Index Spreads and Participation rates are disclosed.
- c. Guaranteed Spreads and Participation Rates.
- d. Principle Protected Minimum Guaranteed Contract Values (SNFL).
- e. Up-side market potential without down-side risk.

Index Deferred Annuity

Cons

- a. Crediting methodology more complex to understand.
- b. More moving parts at discretion of Company.
- c. Product could credit 0% interest in some years when Index declines.

Variable Annuity

Pros

- a. Greater potential for growth.
- b. Lower surrender charges and spreads due to SEC regulations.
- c. M&E Fees are guaranteed not to change.
- d. NASD licensed agents.

Variable Annuity

Cons

- a. Principle not protected on separate accounts.
- b. Complex to understand.
- c. Investment expenses taken out at fund level.
- d. Must review the prospectus.

ANNUITY TAXATION

Qualified Annuities

- a. 100% of the distributions or benefit payments are subject to income tax
- b. Minimum distributions are required to begin at age 70 ½
- c. Distributions prior to age 59½ are subject to a 10% penalty tax

Non-Qualified Annuities

- a. Only interest earned on the annuity is taxable
- b. Distributions prior to age 59½ subject to 10% penalty tax
- c. No age requirement for taking distributions
- d. Exclusion ratio determines the portion of the annuity benefit payment not subject to taxation
 - ❖ The exclusion ratio is the ratio of the contract investment to the expected return

CALCULATIONS

Example of Surrender Charge and Cash Surrender Value Calculation:

Policy Year = 5

Single Premium = \$100,000.00

Account Value = \$129,461.86

Surrender Charge % = 8.0%

Calculate the Surrender Charge

Calculate the Cash Surrender Value

Contract Year	Surrender Charge Percent
1	12%
2	11%
3	10%
4	9%
5	8%
6	7%
7	6%
8	5%
9	4%
10	2%
11 +	0%

CALCULATIONS

Calculating the Surrender Charge

Surrender Charge = AV x SC%
 Surrender Charge = \$ 129,461.86 x .08
 Surrender Charge = \$ 10,356.95

Calculating the Cash Surrender Value

Cash Surrender Value = AV – SC
 Cash Surrender Value = \$ 129,461.86 – \$ 10,356.95
 Cash Surrender Value = \$ 119,104.91

CALCULATIONS

Example of Free Withdrawal Calculation:

Policy Year = 5
 Single Premium = \$100,000.00
 Account Value = \$129,461.86
 Surrender Charge % = 8.0%
 Free Withdrawal = Interest up to 10% AV
 Calculate the Free Withdrawal Amount
 Calculate the Cash Surrender Value

CALCULATIONS

Calculating the Free Withdrawal Amount

Interest = \$ 29,461
[\$ 129,461 - \$ 100,000.00]

10% of AV = \$ 12,946.19
[\$ 129,461 x .10 = \$12,946]

Free Withdrawal Amount = \$ 12,946

CALCULATIONS

Calculating the Cash Surrender Value

Account Value	\$ 129,461.86
Less Free Withdrawal	<u>\$ 12,946.19</u>
Amount Subject to SC	\$ 116,515.67
Times SC %	<u>X .08</u>
= Surrender Charge	\$ 9,321.25
Cash Surrender Value	\$ 120,140.61

CALCULATIONS

Interest Earnings Crediting Methodology

Fixed Annuity Example:

Premium - \$ 100,000.00
Declared Rate Contract Year 1 – 7.00%
Declared Rate Contract Year 2 – 5.75%
Declared Rate Contract Year 3 – 5.25%

CALCULATIONS

Calculating the Account Value

$$\text{AV Year 1} = \$ 100,000.00 \times 1.0700 = \\ \$ 107,000.00$$

$$\text{AV Year 2} = \$ 107,000.00 \times 1.0575 = \\ \$ 113,152.50$$

$$\text{AV Year 3} = \$ 113,152.50 \times 1.0525 = \\ \$ 119,093.01$$

CALCULATIONS

Interest Earnings Crediting Methodology

Indexed Annuity Point-to-Point Example:

Contract Date – 05/05/2003

Equity Index – S&P 500

Formula – Point-to-Point

Guaranteed Minimum Participation Rate – 25%

Guaranteed Maximum Index Spread – 12.00%

Current Participation Rate Year 1 = 60%

CALCULATIONS

Interest Earnings Crediting Methodology

Indexed Annuity Point-to-Point Example:

Current Index Spread Year 1 = 2.75%

Index Rate Formula: $\text{IR} = (\text{CPR} \times \text{PTPG}) - \text{CIS}$

- IR = Index Rate
- CPR = Current Participation Rate
- PTPG = Point-to-Point Growth in Index
- CIS = Current Index Spread

CALCULATIONS

Interest Earnings Crediting Methodology Indexed Annuity Point-to-Point Example:

PTPG = $(B - A) / A$ where:
B = Ending Index Value
A = Starting Index Value

Calculate the Index Rate

Indexed Annuity Example:

DATE	S&P 500 INDEX
05-May-2003	926.55
05-Jun-2003	990.14
05-Jul-2003	985.70
05-Aug-2003	965.46
05-Sep-2003	1,021.39
05-Oct-2003	1,029.85
05-Nov-2003	1,051.81
05-Dec-2003	1,061.50
05-Jan-2004	1,122.22
05-Feb-2004	1,128.59
05-Mar-2004	1,156.86
05-Apr-2004	1,150.57
05-May-2004	1,121.53

CALCULATIONS

Calculating the Index Rate

PTPG = $(B - A) / A$
A = 926.55
B = 1,121.53

PTPG = $(1,121.53 - 926.55) / 926.55$
PTPG = .2104 or 21.04% Growth

CALCULATIONS

Calculating the Index Rate

PTPG = .2104

CPR = 60% (.60)

CIS = 2.75% (.0275)

IR = (CPR x PTPG) – CIS

IR = (.60 x .2104) - .0275

IR = .0987 or 9.87%

CALCULATIONS

Interest Earnings Crediting Methodology

Indexed Annuity Monthly Average Example:

Contract Date – 05-05-2003

Equity Index – S&P 500

Formula – 12 Month Average

Guaranteed Minimum Participation Rate – 100%

Guaranteed Maximum Index Spread – 8.00%

Current Participation Rate – 100%

Current Index Spread – 2.75%

CALCULATIONS

Interest Earnings Crediting Methodology

Indexed Annuity Monthly Average Example:

Index Rate Formula: IR = (CPR x MAG) - CIS

IR = Index Rate

CPR = Current Participation Rate

MAG = Monthly Average Growth in Index

CIS = Current Index Spread

CALCULATIONS

Interest Earnings Crediting Methodology

Indexed Annuity Monthly Average Example:

MAG = (B - A) / A where:

B = 12 Month Average Index Value

A = Starting Index Value

B = Sum of 12 months of S&P 500 Index Values divided by 12.

Calculate the Index Rate

CALCULATIONS

Calculating the Index Rate

MAG = (B - A) / A

A = 926.55

B = 1,065.47 (12,785.62 / 12)

MAG = (1,065.47 - 926.55) / 926.55

MAG = .1499 or 14.99% Growth

CALCULATIONS

Calculating the Index Rate

MAG = .1499

CPR = 100% (1.00)

CIS = 2.75% (.0275)

IR = (CPR x MAG) - CIS

IR = (1.00 x .1499) - .0275

IR = .1224 or 12.24%

CALCULATIONS

Interest Earnings Crediting Methodology

Variable Annuity Example:

Issue Date of Policy 7-1-2004 Premium = \$ 100,000

Variflex Growth Series on 7-1-2004

Net Asset Value = \$ 3,987,481.50

Total Shares = 100,314

Net Asset Value per share = \$ 3,987,481.50 / 100,314

Net Asset Value per share = \$ 39.75

Value Per Unit = \$ 39.75

Calculate Number of Units Purchased on Issue Date

CALCULATIONS

Calculating the Number of Units

Premium = \$ 100,000.00

Value Per Unit 7-1-2004 = \$ 39.75

Number of Units = Premium / Value Per Unit

Number of Units = \$ 100,000.00 / \$ 39.75

Number of Units = 2,515.72327

CALCULATIONS

Interest Earnings Crediting Methodology

Variable Annuity Example:

On 7-2-2004 one day after issue, Variflex Growth Series

Net Asset Value = \$ 4,092,634.00

Total Shares = 102,830

Net Asset Value per share = \$ 4,092,634.00 / 102,830

Net Asset Value per share = \$ 39.80 on 7-2-2004

Previous Day's NAV per share = \$ 39.75 on 7-1-2004

CALCULATIONS

Interest Earnings Crediting Methodology

Variable Annuity Example:

GIF = \$ 39.80 / \$ 39.75
GIF = 1.001257862 on 7-2-2004
M&E Fee = 1.40% Annual
Daily M&E Fee = .000038356 [.0140 / 365]
NIF = GIF – Daily M&E Fee
NIF = 1.001257862 – .000038356
NIF = 1.001219506 on 7-2-2004

CALCULATIONS

Interest Earnings Crediting Methodology

Variable Annuity Example:

Value Per Unit 7-1-2004 \$ 39.75
Net Investment Factor = 1.001219506 7-2-2004
Value Per Unit = Previous Day VPU times NIF
Value Per Unit = 39.75 x 1.001219506
Value Per Unit 7-2-2004 \$ 39.79847536

Calculate the Account Value on 7-2-2004

CALCULATIONS

Calculating the Account Value

Number of Units = 2,515.72327
Value Per Units = \$ 39.79847536
Account Value = Number of Units x Value Per Unit
Account Value = 2,515.72327 x 39.79847536
Account Value = \$ 100,121.95

CALCULATIONS

Pay-Out Option Example

Annuity Date – July 1, 2004
Cash Surrender Value = \$ 466,095.71
Annuitant's Age = 73
Annuitant's Sex = Female
Calculate Guaranteed Monthly Income

CALCULATIONS

Calculating Guaranteed Monthly Incomes

Life Income = \$ 3,794.00
Life Income with 10 Years = \$ 3,393.00
Life Income with 20 Years = \$ 2,619.00
10 Year Certain = \$ 4,596.00
20 Year Certain = \$ 2,689.00

CALCULATIONS

Calculating Exclusion Ratio

Non-Qualified Annuity
Premium = \$ 100,000.00
Cash Surrender Value = \$ 466,095.71
Interest = \$ 366,095.71
Female, Age = 73
Expected Return IRS table 13.9 years
Monthly Benefit = \$ 3,794.00 for Life

CALCULATIONS

Calculating Exclusion Ratio

Exclusion Ratio = $100,000 / [12 \times 3,794.00 \times 13.9]$
Exclusion Ratio = .158018
Amount of tax exempt for each payment = \$ 599.52
Taxable amount of each payment = \$ 3,194.48
Annual Taxable Amount = \$ 38,333.76
Annual non-taxable Amount = \$ 7,194.24

Your Questions?



The Kansas Insurance Department
Sandy Praeger, Commissioner

CONSUMER HOTLINE:
1-800-432-2484

420 SW 9th Street
Topeka, KS 66612
Phone: 785-296-3071
Fax: 785-296-5806
Email: commissioner@ksinsurance.org
Website: www.ksinsurance.org
Office hours 8:00-5:00 Monday -- Friday
