Major Types of Annuities

Annuities Bought for Accumulation (Deferred Annuities)

Fixed annuities
   Book value
   Market-value adjusted (MVA)
   Indexed

Variable annuities (traditional, indexed)

Annuities Bought for Income (Income Annuities)

Immediate annuities
   Fixed (nominal, inflation-adjusted)
   Variable

Deferred income annuities (DIA)
   Advanced-life delayed annuity (ALDA)
   Ruin-contingent life annuity (RCLA)

Variable annuity guaranteed living benefits (VAGLBs)
   Guaranteed lifetime withdrawal benefit (GLWB)
   Guaranteed minimum withdrawal benefit (GMWB)
   Guaranteed minimum income benefit (GMIB)
   Guaranteed minimum accumulation benefit (GMAB)

Standalone living benefits (SALB), contingent deferred annuities (CDA)

Combination products (annuity + long-term care or critical illness benefit)
Type of annuity: Fixed deferred (book value, MVA)

Resources: New contracts: Fisher Annuity Index, VitalAnnuity, Beacon AnnuityNexus
            Existing contracts:

Challenges: What is the value of the guaranteed minimum interest rate? Approaches:
            Economic valuation, comparison with current rates

            What is the value of the guaranteed settlement options? Approaches:
            Economic valuation, comparison with current rates

            What is the impact of illiquidity on the optimal allocation? Approaches:
            Portfolio optimization with rebalancing constraints

No-brainers: High guaranteed minimum interest rate
              Declining surrender charge

Type of annuity: Fixed indexed

Resources: New contracts: VitalAnnuity, Wink (formerly AnnuitySpecs)
            Existing contracts:

Challenges: Is the downside protection a good deal? Approaches: Economic valuation,
            simulation

No-brainers: Predictably low credited interest rate
              Declining surrender charge

Type of annuity: Variable deferred

Resources: New contracts: Morningstar
            Existing contracts: Morningstar, Annuity Review

Challenges: What is the value of the guaranteed minimum death benefit and guaranteed
            living benefits? Approaches: Economic valuation, simulation

            Should you accept a buyout offer? Approaches: Valuation of guarantees

            What is the appropriate allocation in the total portfolio? Approaches:
            Normative theories of rational choice

No-brainers: Declining surrender charge
              Deep-in-the-money options
**Type of annuity:** Immediate

Resources: New contracts: CANNEX, Hueler, immediateannuities.com

Existing contracts:

Challenges: What is the appropriate allocation? Approaches: Normative theories of rational choice

No-brainers:

**Type of annuity:** Deferred income

Resources: New contracts: CANNEX, Retirement Income Journal

Existing contracts:

Challenges: What is the appropriate allocation? Approaches: Normative theories of rational choice

No-brainers:

**Type of annuity:** Combination (hybrid, linked benefit) products

Resources: New contracts:

Existing contracts:

Challenges: Is the combination product a good deal? Approaches: Economic theory of optimal insurance contract design, real options analysis, replication of benefits with standalone products, product pricing

No-brainers: Immediate annuity with enhanced benefits for long-term care
Important Concepts in Theories of Rational Choice

- Normative (prescriptive) vs. positive (descriptive)
- Expected utility vs. alternatives
- Separable and additive vs. recursive
- State independent vs. state dependent
- Risk, loss, regret, disappointment, ambiguity

Resources

- Retirement Income Journal (retirementincomejournal.com)
- Beacon Research, Inc. (beaconresearch.net, annuïnyexus.com)
- Wink, Inc. (looktowink.com)
- Center for Retirement Research (crr.bc.edu)
- General Accountability Office (gao.gov)
- Individual Finance and Insurance Decisions Centre (ifid.ca)
- Pension Research Council (pensionresearchcouncil.org)
- Society of Actuaries (soa.org)
- Insured Retirement Institute (irionline.org)
- LIMRA (limra.com)
- National Association for Fixed Annuities (nafa.com)
- Retirement Income Industry Association (riia-usa.org)
| January-September 2013 Annuity Sales (in $billions) |
|---------------------------------|-------|-------|
| Deferred                        |       |       |
| - Fixed-rate (book value, MVA)  | $24.0 | Up 5% |
| - Indexed                       | 26.8  | Up 6% |
| - Variable                      | 109.6 | Down 2% |
| Immediate                       | 5.7   | Level |
| Deferred income                 | 1.5   | Up 132% |
| Total                           | $167.6 |       |

Source: LIMRA