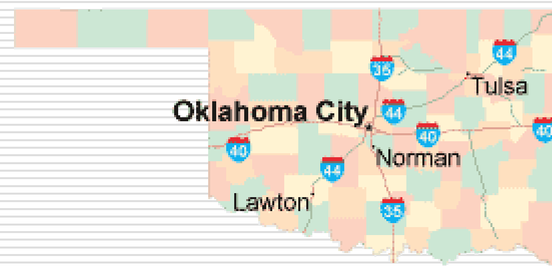
Optimal Distribution Rules for Defined Contribution Plans: What Can We Learn from Other Countries?



Professor Jon Forman

University of Oklahoma

Eighth International Longevity Risk and Capital Markets Solutions Conference

(Longevity 8)

University of Waterloo

Waterloo, Ontario

September 7, 2012

Outline

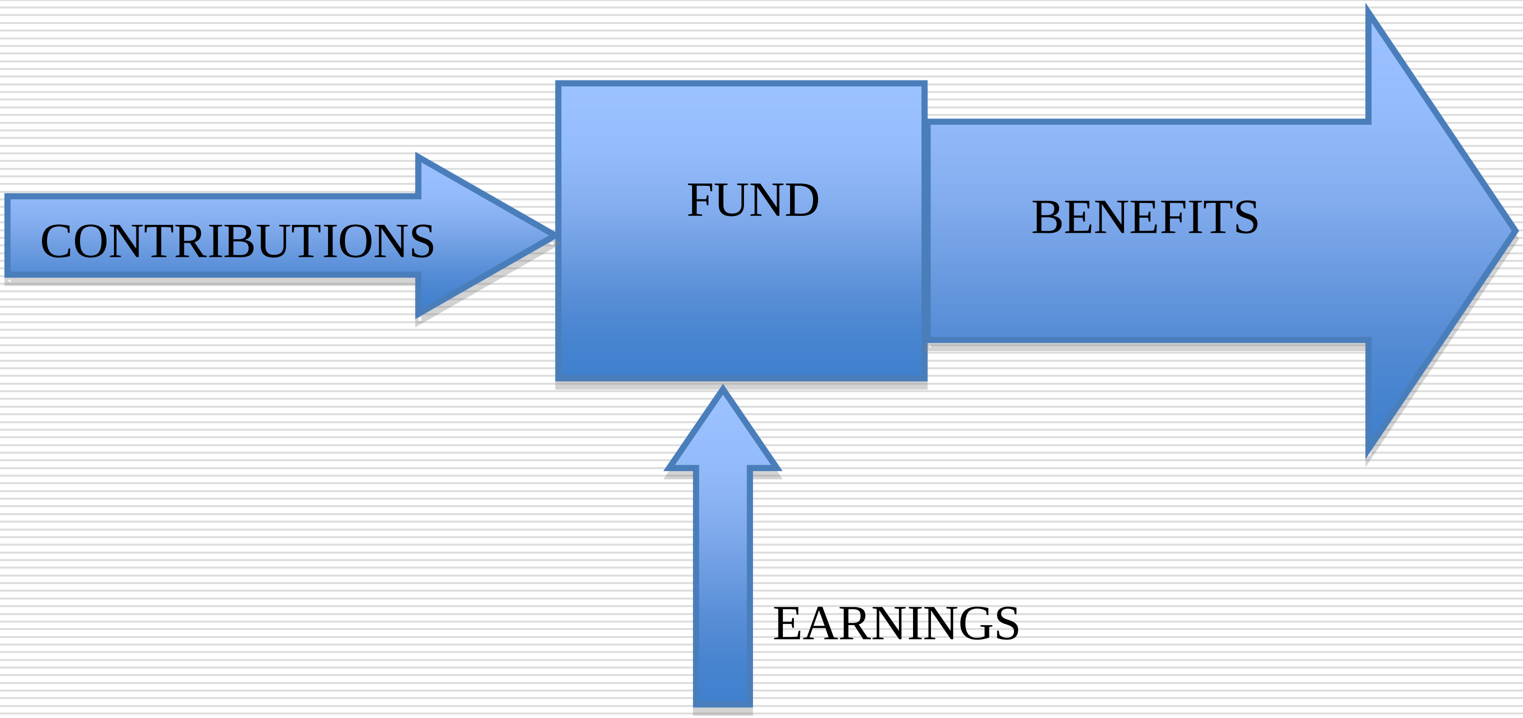
- Defined Contribution Plans
  - in the U.S
  - & around the world
- Longevity Risk
- Financial Products for Lifetime Income
- Optimal Distribution Rules

Multi-pillar Retirement System

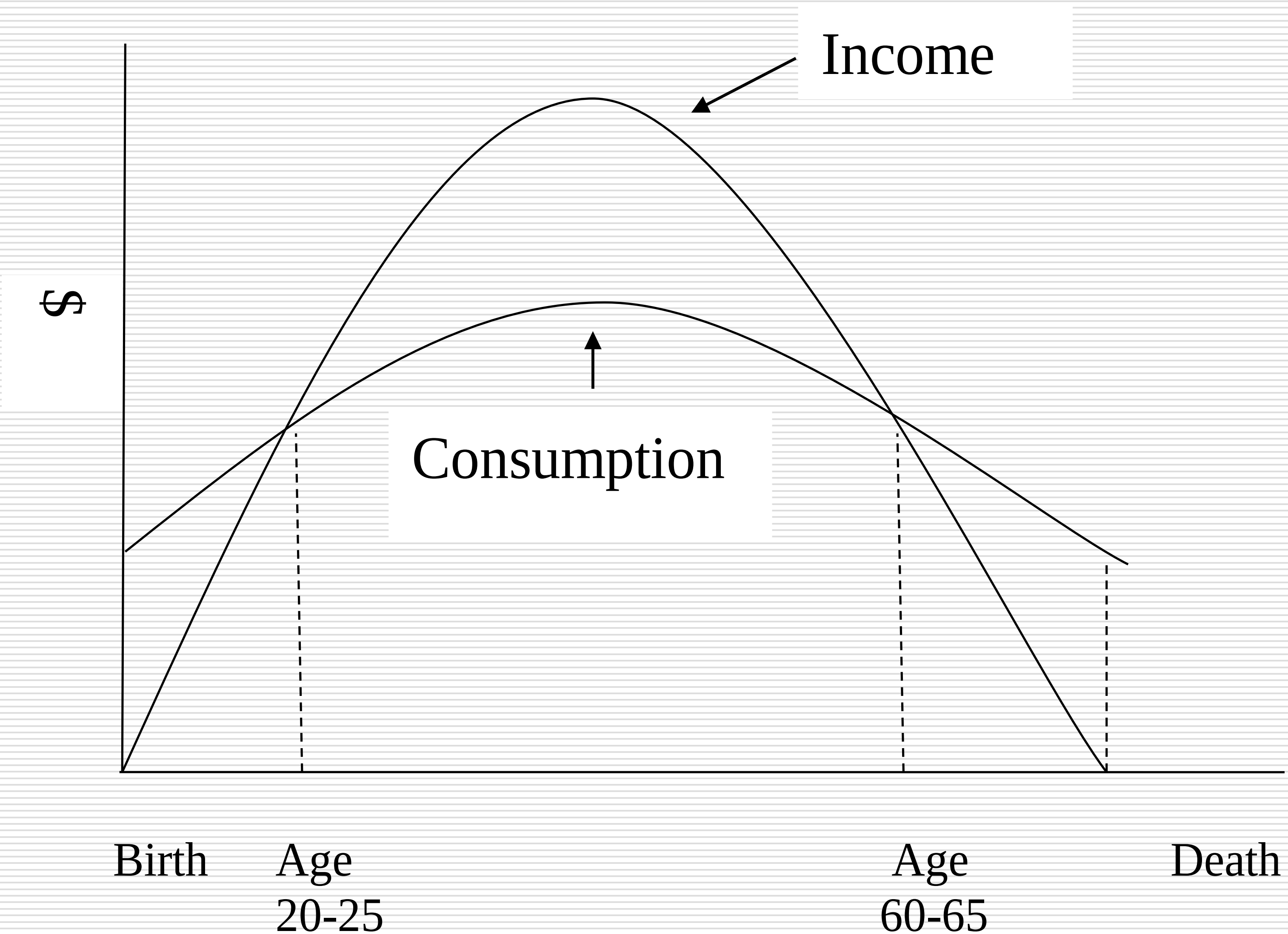
- 1st tier - Government pension
- 2nd tier - Occupational pension
- 3rd tier - Personal savings

- Now, the 2nd and 3rd tiers are defined contribution plans and IRAs, not traditional monthly pensions

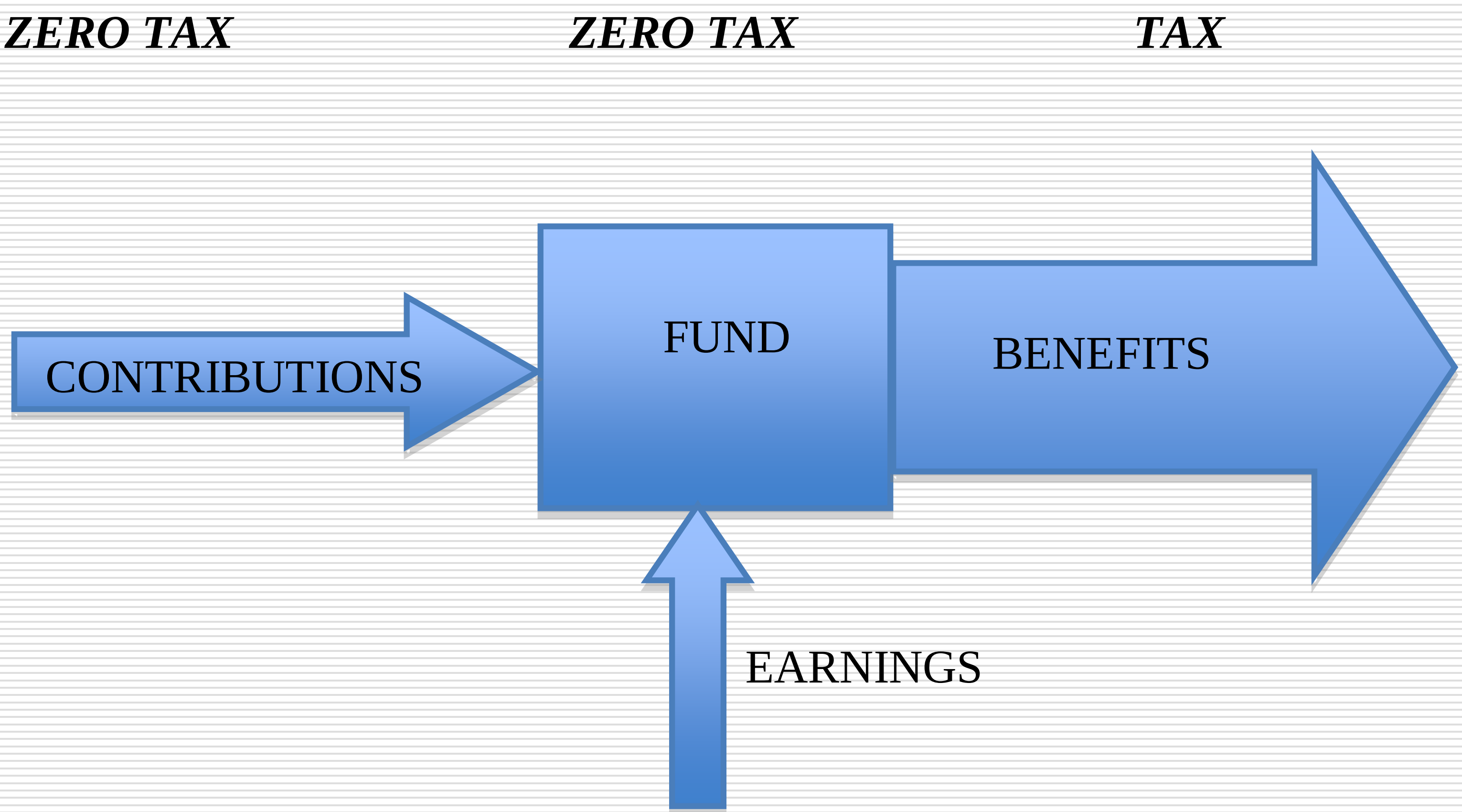
A Simple Defined Contribution Plan



Stages of the Simple Economic Life Cycle



Tax Treatment of a Typical Defined Contribution Plan in the U.S. – eet



Decline of Annuitization

- An annuity is a financial instrument (e.g., an insurance contract) that converts a lump sum of money into a stream of income payable over a period of years, typically for life.
- In 2010, for example, just 18 percent of private industry workers in defined contribution plans had annuities available to them.

The Annuity Puzzle

- People rarely choose to buy annuities voluntarily
  - Financial literacy is low
  - Bequest motive
  - Adverse selection
  - Social Security
  - Little savings

Australia - Superannuation

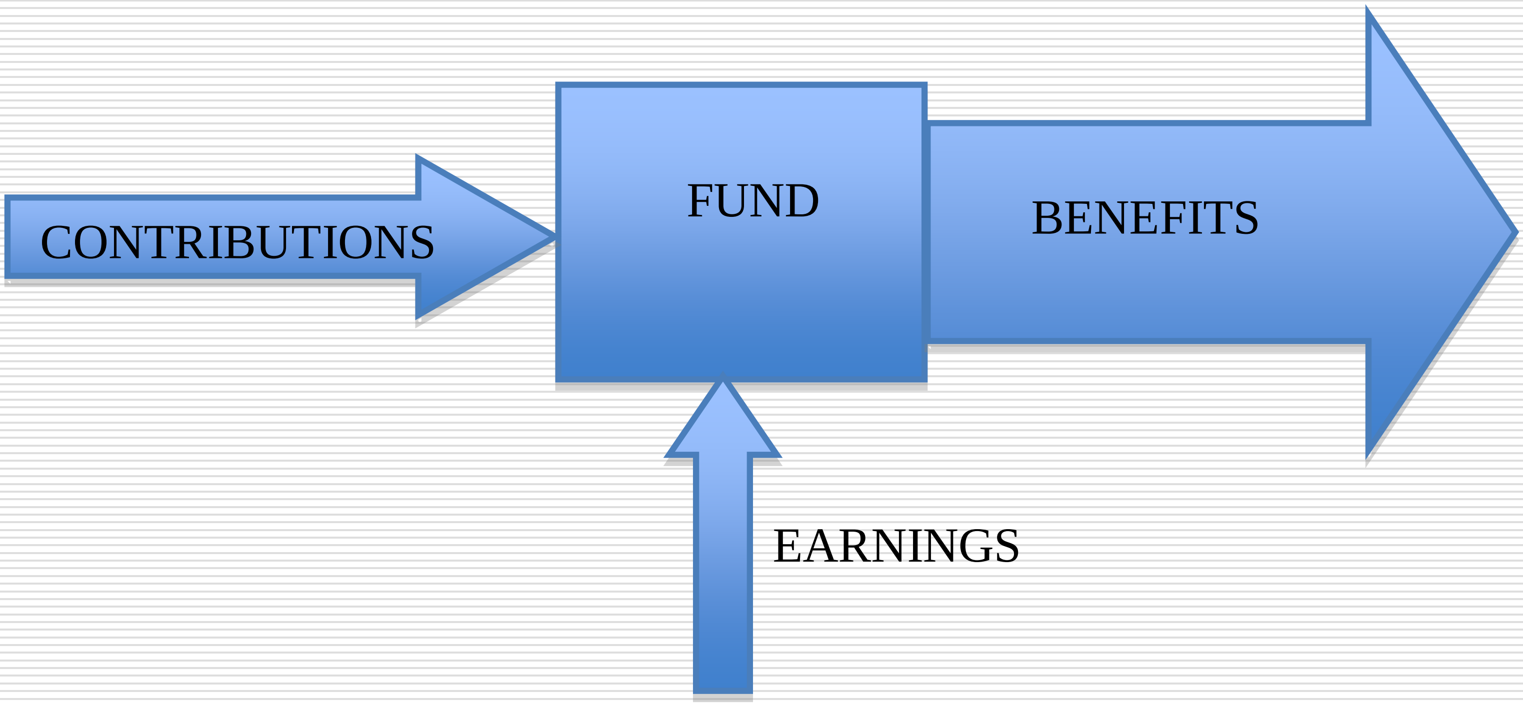
- Age Pension
  - Means-tested
  - e.g., AUD$689 every fortnight for singles
- Superannuation
- 9% of pay, going to 12%
- Lump sum distributions, not annuities

Tax Treatment of a Typical Individual Account in Australia – tte

15% TAX
(payable by the fund)

15% TAX

ZERO TAX
(from age 60)



Annuitization Successes around the World

- **Chile** – 2/3 of universal 10% DC plan participants purchase annuities
- **Switzerland** – 80% annuitize
  - default & peer effects
- **United Kingdom** –
  - must annuitize at least 75%
- **Singapore** –
  - moving towards mandatory annuitization

Longevity Risk: People in the U.S. are Living Longer

Year	*Life expectancy at birth*		*Life expectancy at age 65*	
	Men	*Women*	*Men*	*Women*
1960	66.7	73.2	12.9	15.9
2000	74.0	79.4	15.9	19.0
2010	75.8	80.5	17.5	19.9
2040	79.3	83.3	19.8	21.7
2080	82.9	86.4	21.9	23.8

Lifetime Retirement Income Products

- Systematic withdrawals
- Lifetime annuities
- Longevity insurance
- Guaranteed lifetime withdrawal benefits

SYSTEMATIC WITHDRAWALS

- e.g., the <u>4 percent rule</u>
  - Set spending at 4% of savings
  - Invest in a 50/50 stock/bond portfolio
  - Each year, increase spending to keep up with inflation
    - e.g., $1,000,000 nest egg
      - $40,000 in the 1st year
      - $41,200 in the 2nd year (~ 3% inflation)
      - etc.
  - Some possibility of running out of money

Lifetime Annuities

- Depending on the retiree's age, can provide cash flows of 7% of funds invested
  - e.g., a 65-year-old man who purchased a $100,000 immediate, level-payment annuity in 2011 – $6,732/year (6.73%)
  - 65-year-old woman – $6,264/year (6.26%)

Inflation-adjusted Annuities

- Annual payouts start lower but can end up higher
  - Level payment annuity
    - $6,732/year for a 65-year-old man
  - Annuity with a 3-percent escalator
    - $4,944 in the 1st year
    - More in later years

Longevity Insurance (e.g., Deferred Annuities)

- e.g., a 65-year-old man could invest \$100,000 in a deferred annuity & beginning at age 85, he would get \$25,451/year
- Instead, start at age:
  - 80, get \$17,069/year
  - 75, get \$11,649/year
  - 70, get \$8,133/year

Guaranteed Lifetime Withdrawal Benefits (GLWB)

- Variable annuity invested in a portfolio of stocks/bonds/etc.
  - Portfolio grows (or shrinks)
- Retirement: Guaranteed withdrawals
  - Payouts come from the invested funds
  - If funds are ever depleted due to long life and/or poor investment returns, the guaranteed minimum kicks in
  - If funds do well, payouts can increase

GLWB continued

- The guaranteed withdrawal rate is determined at the time of the sale
  - It might be set at between 4% & 6%, depending upon the age when withdrawals are set to begin
- Disadvantages
  - Complicated
  - Can have annual costs that exceed 3%
  - Rarely have an inflation adjustment

Optimal Distribution Rules

- Encouraging annuitization
  - Mandatory annuitization
    - Up to the poverty level
  - Defaults
    - Require DC plans to offer annuities
    - Default participants into annuities
- Financial education
  - annuity values on benefit statements
- Asset tests in public programs

Other Things Government Can Do

- Encourage workers to save more
- Help workers invest better
- Preserve benefits until retirement
- Raise the retirement age
- Make it easier to annuitize housing and other forms of wealth

About the Author

- **Jonathan Barry Forman ("Jon")** is the Alfred P. Murrah Professor of Law at the University of Oklahoma College of Law and the author of *Making America Work* (Washington, DC: Urban Institute Press, 2006).
- Jon was the Professor in Residence at the Internal Revenue Service Office of Chief Counsel, Washington, DC, for the 2009-2010 academic year.
- Jon can be reached at jforman@ou.edu, 405-325-4779, www.law.ou.edu/faculty/forman.shtml.