New Approaches to Retirement Income Phasing

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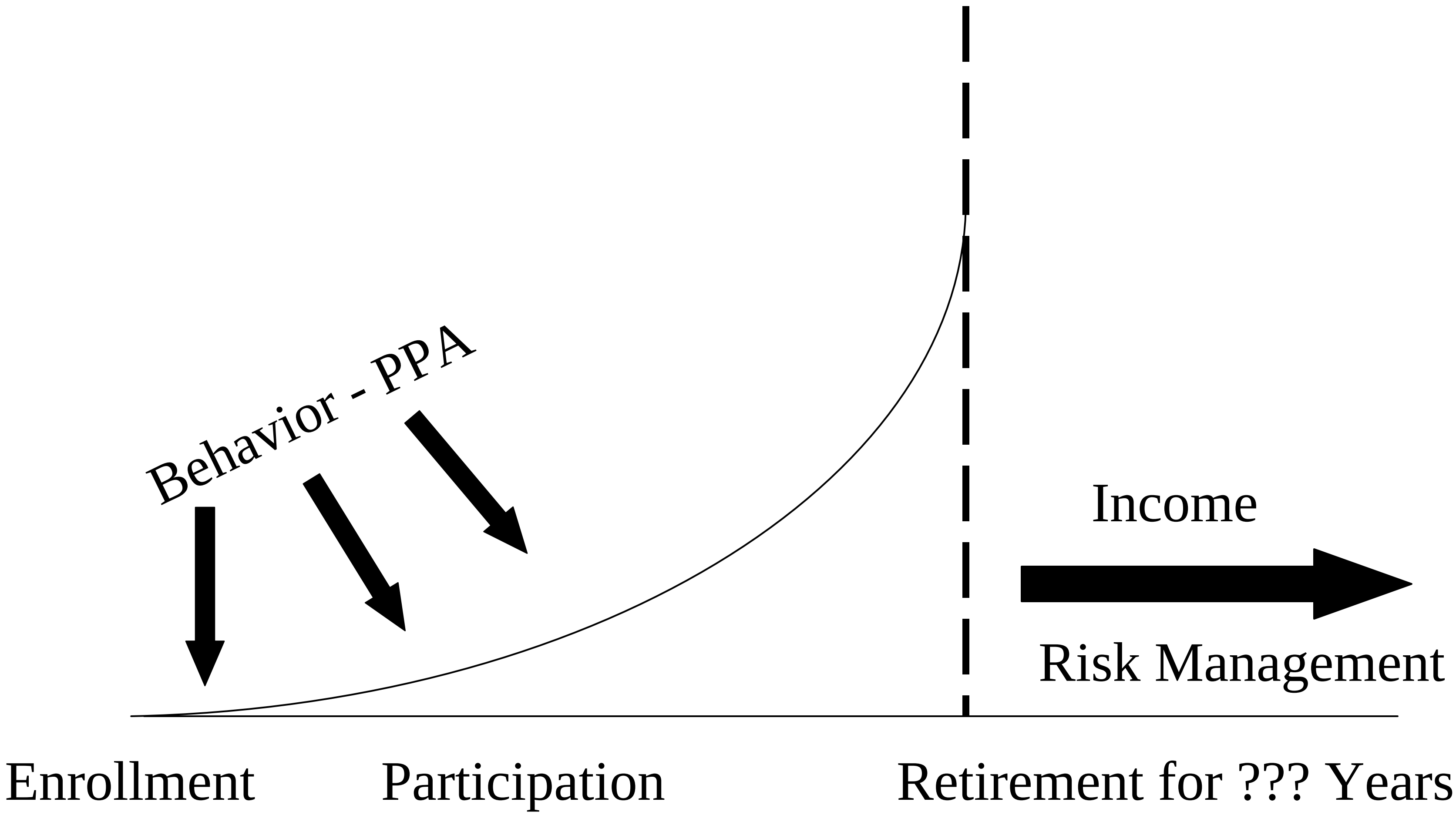
DB to DC = Do-It-Yourself

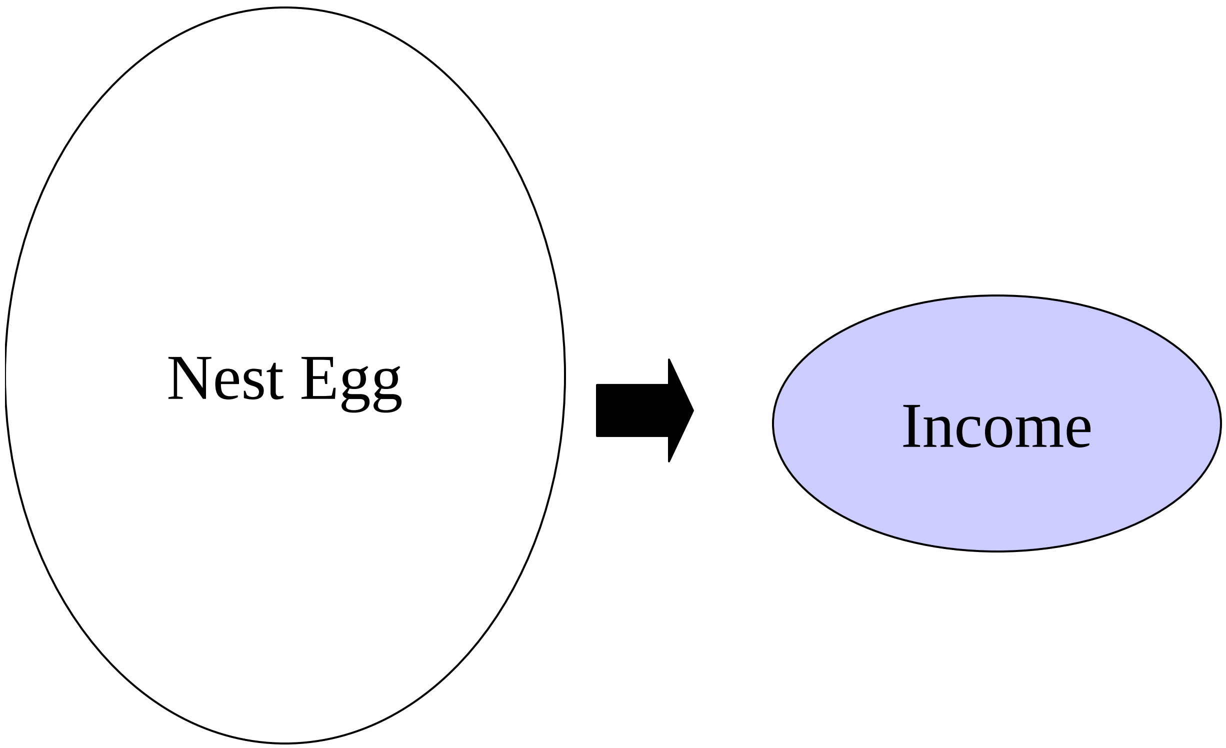


Income and Risk Management

Personal Savings
(IRA, 401k)

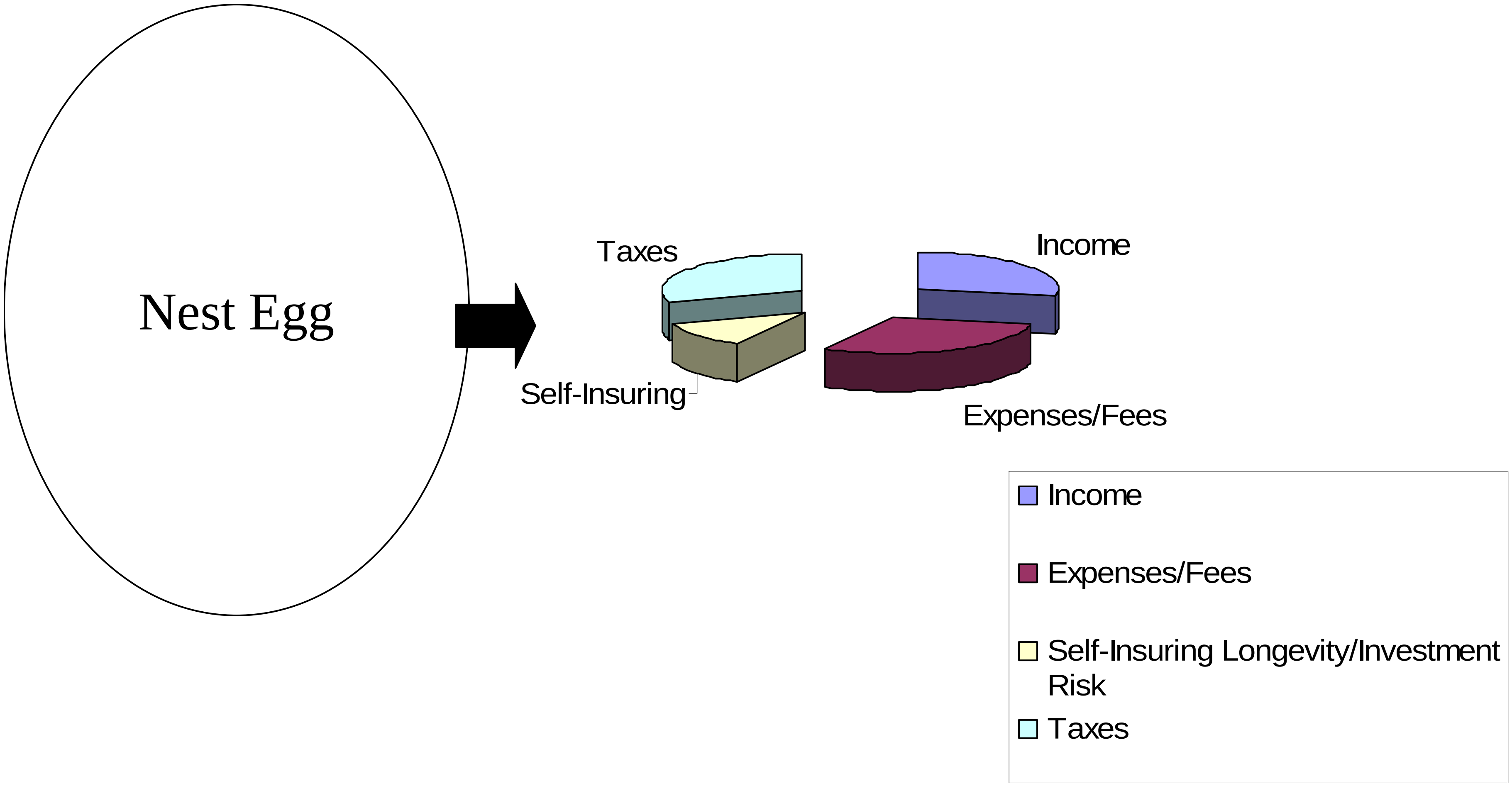
Social Security

What Happens to Potential Income?



- Investment Risk
- Longevity Risk
- Inflation
- Death of a Spouse

What Happens to Potential Income?



Better Outcome?

Personal Savings
(IRA, 401k)

Social Security

Challenge Conventional Wisdom

- Look at “Take Up” decision
  - What has changed?
- Look at Social Security from a risk management perspective
  - Avoid just looking at PV of Life Expectancy
  - Acknowledge advantages of risk pooling and insurance
- Review what retirees are actually doing
- Look at how IRA income and Social Security income act together
  - Taxation
    - What matters is after-tax income to the retiree
  - Compare and contrast
    - Investment fees/expenses
    - Behavior

Prior Work

- Coile and Gruber (2000)
- Gustman and Steiner (2002)
- Jennings and Reichenstein (2001)
- Mucksian (2004)
- Pye (2001)

Post-Retirement Risk

- Investment Risk
  - Positive market returns
  - Pick the right funds
  - Investor Behavior
    - Dalbar QAIB (2004): 1984-2003
      - S & P 500 = 12.98%
      - Average Equity Fund Investor = 3.51%
      - Average Market Timer = (3.29%)

      - Long Term Government Bond Index = 11.16%
      - Average Fixed Income Investor = 3.29%

Investment Returns

Table 1: Projected Real Rates of Return over next 40 years

Name	Organization	Stocks	Gov. Bonds	Corp. Bonds
William Dudley	Goldman Sachs	5.00%	2.00%	2.50%
Jeremy Siegel	Wharton	6.00%	1.80%	2.30%
David Rosenberg	Merrill Lynch	4.00%	3.00%	4.00%
Ethan Harris	Lehman Brothers	4.00%	3.50%	2.50%
Robert Shiller	Yale	4.60%	2.20%	2.70%
Joseph LaVorgna	Deutsche Bank	6.50%	4.00%	5.00%
Parul Jain	Nomura	4.50%	3.50%	4.00%
John Lonski	Moody's	4.00%	2.00%	3.00%
David Malpass	Bear Sterns	5.50%	3.50%	4.25%
Jim Glassman	J.P. Morgan	4.00%	2.50%	3.00%
	Average	**4.81%**	**2.80%**	**3.33%**

Source: *The Wall Street Journal*, February 28, 2005

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Typical Annual Expense Ratio = 1.50% stocks and .75% bonds

Cumulative Assumptions 60% stock/ 30% Bond/ 10% Cash + 3% inflation	**5.78%**

Longevity Risk

- Huge issue for spouses
- Little annuitization
- Monte Carlo simulation (Bengen 1994)
- Expenses do matter but are left out
  - Pye (2001)
  - Reduce SWR by (1-{Expenses/Expected Return})
  - Example:
    - 4% SWR, 2.5% Expenses, 7% Gross Return
    - 4% reduced to 2.57% (1- {.025% /.07})

Social Security:Updated

- FRA to 66: 20% real reduction increased to 25% @ 62
- 8% real increase in Delayed Retirement Credits
- COLA increases between 62, 66, 70
- Survivor benefit
  - The second decision point
- More women have their own benefit (options)

Social Security: Updated

- Spousal benefit
  - Greater of spouse's own benefit or 1/2 of primary worker's
  - Actually two benefits
  - "Eligible" vs "Entitled"
    - Control over when to start each
      - Spousal benefit only when "entitled"
    - New option to File and Suspend
      - Senior Citizens' Freedom to Work Act of 2000
      - Primary Worker must be at FRA
      - Spousal benefit: No DRCs
      - Value of spousal benefit reduced over time

Social Security Taxation

- Thresholds not indexed
  - Up to 50% = \$25,000 (single), \$32,000 (married)
  - Up to 85% = \$34,000 (single), \$44,000 (married)
- "Tax torpedo"
  - \$1 of IRA income = \$1.85 of income (\$1 + {\$1 x.85})
  - 46.25% marginal, federal tax rate (\$1.85 x .25)
  - Higher with state taxes and increasing with "sunset"
- Conventional wisdom of deferring income from tax-qualified sources is creating deferred taxed liability
- "False Leap" that 85% of SS <u>will be</u> taxed

Two Critical Pieces

- Combined Income formula treats SS at 50% rate
- Least of three tests:
  - 85% of benefits
  - 50% of benefits + 85% of Combined Income over second threshold
  - 50% of Combined Income over first threshold + 35% of Combined Income over second.
    - $32,000 first threshold for married
    - $64,000 of SS income before hitting first threshold
- Trade higher lifetime IRA income for greater SS income
- (Ignoring probable increases in tax rates in the future)

More Tax Efficient Solution

- Take IRA income first
- Delay SS to create larger SS income stream
- Advantage for widow too
  - Single tax rates and single SS taxation threshold
  - “Early SS” survivor benefit + IRA income = nearly all taxed

    Vs.

  - “Delayed SS” survivor benefit = all/nearly all income escapes taxation ($50,000 under third test)

Same Pre-Tax Income, 52% Higher AGI

Table 3: Comparison of Taking Higher Amount of Income in Form of Social Security				
Tax Year	2006		2006	
Social Security Income	$24,000		$39,000	
IRA yearly withdrawal	$45,000		$30,000	
Other Taxable Income	$0		$0	
Sum of Income from all sources	$69,000		$69,000	
Combined Income	$57,000		$49,500	
50% Excess over 1st Threshold. + 35% Excess over 2nd	$17,050		$10,675	
85% of Benefits	$20,400		$33,150	
50% of Benefits + 85% Excess over 2nd Threshold	$23,050		$24,175	
Adjusted Gross Income (minimum of Combined Income Tests + IRA Income)	$62,050		$40,675	
Federal Taxes	$6,060		$2,854	
State Taxes	$2,891		$1,895	
Other Non-Taxable Income	$0		$0	
Total After-tax Income	$61,703		$65,321	
Note: State taxes are assumed to be 4.66%				

IRA income reduced

Combined Income Reduced

AGI lower

Three Unique Strategies

- Delay Primary to age 70
  - Scenario I = Spouse takes all benefits (any worker or spousal) ASAP
  - Scenario II = Spouse takes all benefits (any worker or spousal) at her FRA
  - Scenario III = Spouse takes worker benefits at her age 70
- Under all strategies “File and Suspend” when primary reaches FRA
- Three examples:
  - Spouse has \$0 SS, \$300 SS, \$1000 SS

Table 2: Actuarial Present Value of Social Security in 2006 Dollars. In Each Example, Primary Worker is Entitled to $1,414 Per Month

	Primary		Spouse			
				Scenario I*	Scenario II**	Scenario III***
	Early @ 62	**Delayed @ 70**	Early @ 62		Delayed	
A) $0 Spouse Worker Benefit, Spousal Benefit Only	$310,317	**$343,434**	$100,395	**$103,825**	N/A	N/A
B) $300 Spouse Worker Benefit & Smaller Spousal Benefit	$310,317	**$343,434**	$103,438	**$105,412**	$103,621	$99,696
C) $1,000 Spouse Worker Benefit & No Spousal Benefit	$310,317	**$343,434**	$152,144	**$152,144**	$146,565	$133,480

Note: Actuarial Present Value calculated using a 5.78% net interest rate and the 1994 Group Annuity Rates mortality table for a couple both age 62

* Spouse's worker's benefit (if any) begins at age 62, Spousal benefit (if any) begins at age 66
** Spouse's worker's benefit (if any) begins at age 66, Spousal benefit (if any) begins at age 66
*** Spouse's worker's benefit (if any) begins at age 70, Spousal benefit (if any) begins at age 66

Case Study: Married

- John and Linda, both 62 at retirement
- $3,000/mo. Joint and 100% Survivor pension
- John $1,414/mo. and Linda $300/mo. of SS (+ spousal)
- $247,000 of IRA assets
- Option 1 – IRA income first, then John's delayed SS
  - Start Linda's worker benefit at 62
  - Spousal at 66 (File and Suspend John's benefit)
- Option 2 – Early SS, and couple with IRA withdrawals

Option 1: IRA Bridge Income + Delayed SS

- Create increasing after-tax income stream
  - Determine after-tax income at 70
  - Discount back to age 62 @ 3%
  - Carve out Spousal SS benefit at 66
  - Utilize $247,000 for IRA income
  - Provide IRA payment stream via period certain annuity
    - Retail pricing, 5% interest rate
    - Cash-flow increases at 3% per year
  - Provides $68,000 of after-tax income first year

Option 2: Comparison to $247,000 Bridge Cost

- Match same after-tax cash-flow as Option I
- Early SS strategy needs $1,511/mo. of IRA income in first year
- PV of IRA needed to match (5.78% rate):
  - Life Expectancy = $343,200
  - 75% Percentile = $372,351
  - 90% Percentile = $398,377

  - Inflation-Adjusted SPIA = $409,635
  - Pye Safe Withdrawal = $538,716

Conclusions

- "Risk shifting" must be part of income phasing discussion
- Social Security has significant value
  - Especially as risk management vehicle
  - Include value of survivor benefit
  - Married couples have options
    - Makes sense to stagger start dates
    - Use "File and Suspend" when appropriate
- Don't make false leap that SS taxes are not controllable
  - Couples up to $90,000 of after-tax income may benefit
- Compare taking SS and IRA income at different points
  - Consider taxes, inflation, expenses, and risk management