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Managing, Bearing and Sharing Risk in Retirement Savings Plans

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- Risk avoidance is not a viable strategy when real interest rates are at 1.5%
- Risk avoidance is not a desirable strategy for the retirement savings pool of a country

We need to start with realistic expectations...

- Should we strive for:

- Affordable, adequate guaranteed pensions @ 65?

OR

- Affordable, adequate target pensions @ 65, with participants expected to adjust their savings, consumption, retirement ages, etc. depending on how the investments perform?

The lesson of DB plans...

- The risks are large
- They are manageable, but only to a point
- They are concealable and ignorable, but only to a point
- Ultimately they must be borne by individuals, something we are just now learning to do

There are many sources of risk

Investment Risk

Longevity Risk

Other risks (e.g. population aging, plan maturity)

None is small

- real interest rates 1.5% to 5% in the last 20 years
- real rates of return 0% to 9% in the last 5 decades
- individual lifespan @ 65 10 to 30
- future improvement for 90 year olds – who knows?

How do retirement plans cope with risk?

Risk concealment and denial

- e.g. U.S. public sector plans

Risk management/avoidance

- pooling/insuring diversifiable risks
- hedging, immunizing

Risk sharing/bearing

- allocating risk to individuals
- individuals then adjust savings, consumption, retirement ages, workload, bequests...

- Calpers
 - 15 year smoothing
 - 30 year amortizing
 - assume 4.75% real return
 - oppose mark-to-market disclosure

For individual savings plans risk minimization is expensive, ineffective and, not surprisingly, unpopular...

The investment strategy: – Buy fully indexed deferred annuities

The risk:

- The price is high and very sensitive to real interest rates which have moved between 1.5% and 5.0% in the last 20 years
- 100% of risk borne pre-retirement

Reference Period	Typical Real Interest Rate	Illustrative Expected Cost
1990s	4.50%	15% of pay
2000s	2.00%	30% of pay

- In the absence of demand, there isn't any product available

■ Individuals will typically choose balanced investment portfolios and avoid annuity purchases...

The investment strategy:

- Life cycle funds pre-retirement
- Annuities or low-risk investment strategies post-retirement

The risks:

- Pre-retirement contribution rates and post-retirement incomes are quite uncertain
- A flexible retirement age is important

- Exposure to investment risk is highest in the 10 years before and 15 years following retirement

How do individuals cope with longevity risk?

Longevity risk can be safely ignored by many...

- seniors (due to government pensions)
- DB plan members (public sector)
- those who save too much
- those whose preference is frugal living, a large liquid pool of assets and generous bequests

Many are reluctant to buy annuities due to

- pricing
- loss of control
- distrust

Product innovation opportunities...

- inexpensive long deferred annuities
- guaranteed minimum withdrawal products

Collective risk management – can large groups do better?

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Defined benefit pension plans can transfer cost and risk within and between generations

- Pay-as-you-go funding
- Each generation pays for the preceding generation
 - Works well for the first generation, and thereafter until the population ages/matures

Fully funded DB plans have typically shifted risk to future generations just as pay-as-you-go DB plans shifted cost...

- Each generation bears risk for the prior generation
- Works well for the first generation and thereafter until the population ages/matures
- But the “time diversification” hypothesis – that investment gains and losses will correct themselves if perpetually ignored – didn’t work

- The key to DB plans – if payroll grows at CPI + 4% or 5%, the plan’s stay young

Some problems with DB pension plans...

- A tendency to poorly represent the interests of future generations by
 - pushing cost forward
 - pushing risk forward
 - reacting quickly to surpluses and slowly to deficits
- A tendency to leave taxpayers/shareholders with the risk and members with the rewards of risk-bearing until taxpayers/shareholders figure things out...which doesn't happen until financial disclosure evolves to an advanced state

The future of collective risk management...

- Neither the traditional DB plan nor the traditional DC plan has lived up to expectations. Luckily both can be improved
 - DB → Target benefit
 - DC → Collective DC/Smart DC

Conclusions...

- The risks are large
- Risk management cannot deliver safe, affordable, adequate pensions in a hostile economic environment
- Risk sharing is important; in particular, we should expect retired members to bear some risk
- Collective risk management has promise, but we must do a better job of representing the interests of future generations
- Individuals have many ways to bear risk and cope with disappointment – particularly if they are aware of their exposures and the need to adapt to changing circumstances. A resilient retirement system requires a resilient population

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