



# State and Local Government Pension Costs

## The Gordian Knot of Public Sector Finance

Presentation to the Pennsylvania Senate Finance Committee

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# TIAA-CREF Overview: *For the Greater Good*

- Over 90 years of helping plan sponsors in the government, academic, medical, cultural and research fields provide their employees with adequate and secure income during in retirement. Formed in 1918 by the Carnegie Foundation
- \$402.4 billion in total retirement assets under management\*
- More than 3 million participants in more than 23,000 plans at more than 15,000 public and private not-for-profit clients
- 500,000 participants received *lifetime* annuity income in 2008
- Our Insurance Company Affiliate TIAA has the highest possible ratings from all leading insurance company ratings agencies: A.M. Best Co., Fitch, Moody's Investors Service, and Standard & Poor's \*\*

\* As of 9/30/2009

\*\* Aaa by Moody's (as of 10/09); AAA by Fitch Ratings (as of 6/09); AAA by Standard & Poor's (as of 6/09); and A++ by A.M. Best Company (as of 12/09). These ratings are for TIAA as an insurance company and do not apply to variable annuities, mutual funds or any other product or service not fully backed by the claims-paying ability of TIAA. Ratings are subject to change. There is no guarantee that current ratings will be maintained



# Agenda:

- Overview of national landscape for state and local government public pension benefits
- What states are doing
- Our point of view



# National Perspective: States' Finances in Crisis

- Devastating recession
- Decreasing revenue
- Increasing costs
  - Education
  - Health and Welfare
  - Pensions
- Leveraged finances



\* Source: CBPP: RECESSION CONTINUES TO BATTER STATE BUDGETS; STATE RESPONSES COULD SLOW RECOVERY  
- Elizabeth McNichol and Nicholas Johnson, October 20, 2009



# National Perspective: Public Finances Will Drive the Discussion

- Revenues for governments are in poor shape with no immediate light at the end of the tunnel
- Center on Budget Policy and Priorities reports\*:
  - 48 State Budgets have a combined gaps of \$350 billion for 2010 and 2011
  - Federal assistance will likely end before budget gap problems abate
  - Only two states – Montana and North Dakota - are not reporting budget gaps for 2010

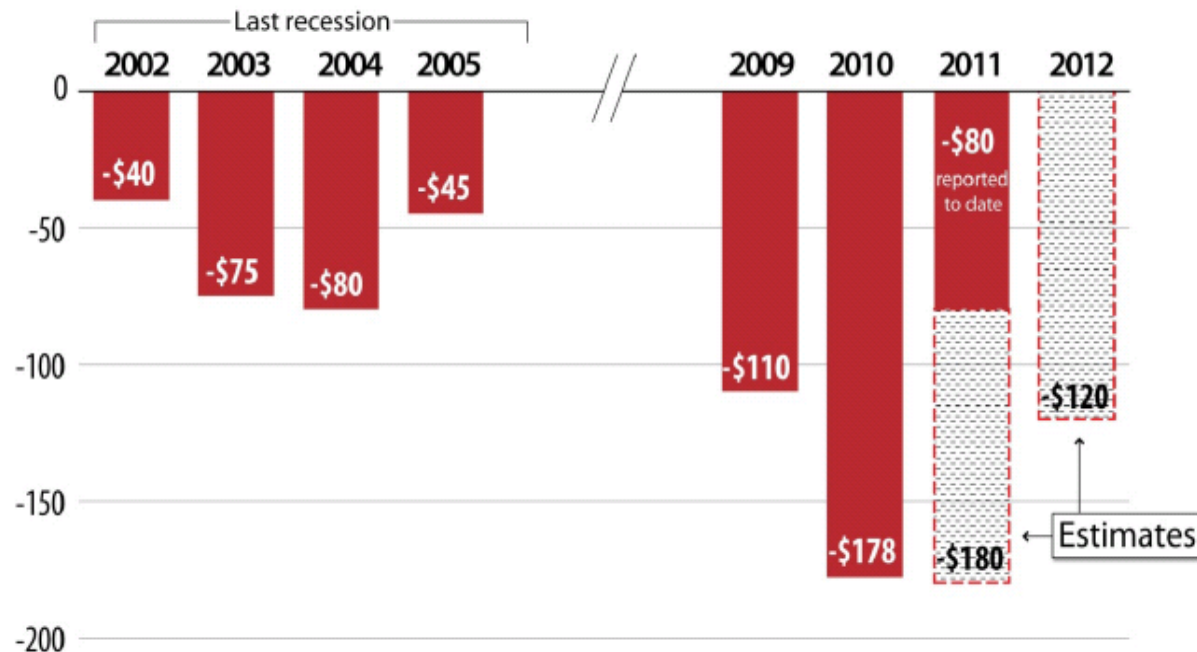
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# National Perspective: And It Won't Get Better Soon

## How Bad Will It Get?

Total state budget shortfall in each fiscal year, in billions



\* Source: CBPP: RECESSION CONTINUES TO BATTER STATE BUDGETS; STATE RESPONSES COULD SLOW RECOVERY  
- Elizabeth McNichol and Nicholas Johnson, October 20, 2009



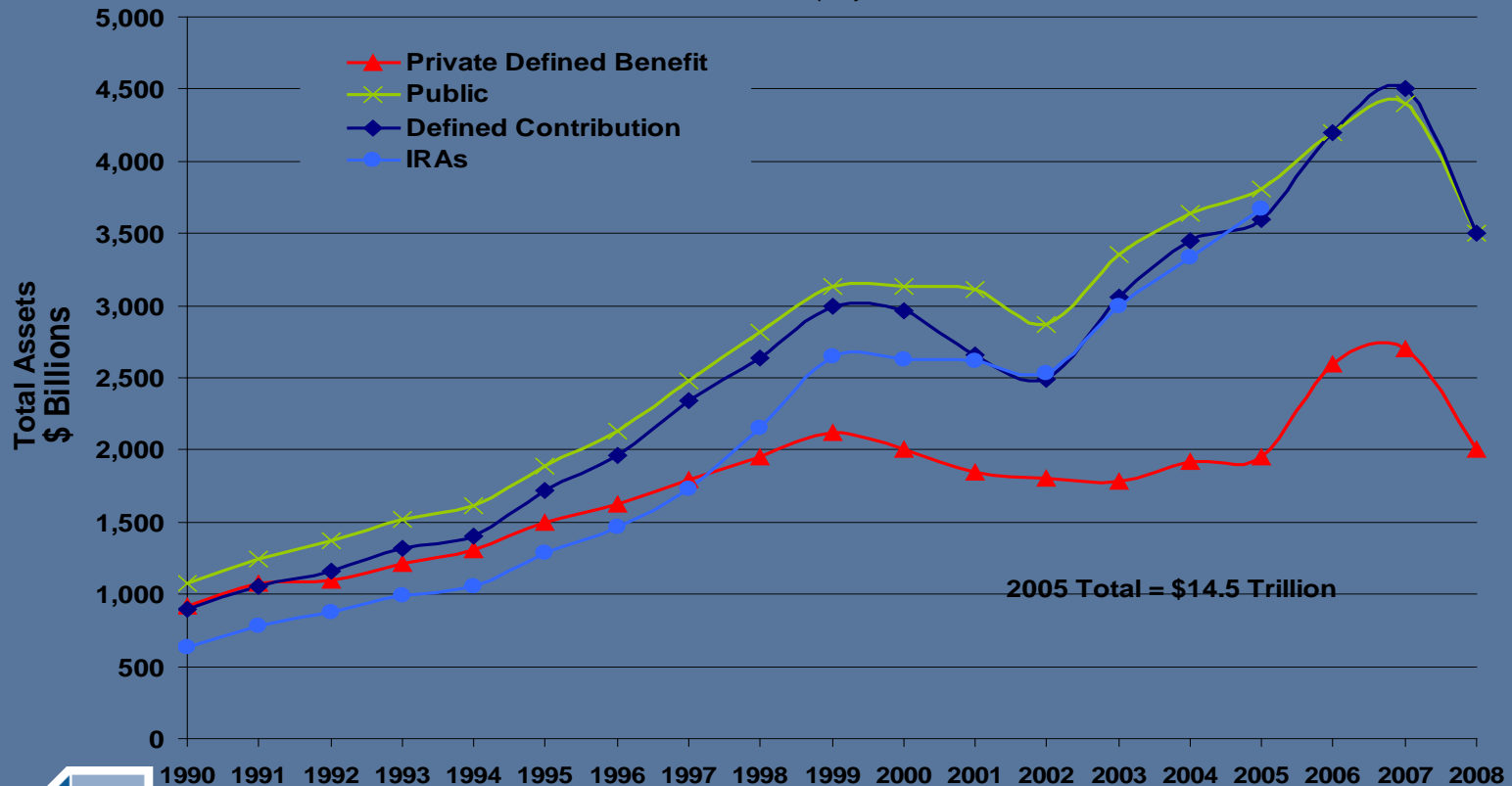
# National Perspective: Why Public Pensions Costs Are Increasing

- Market losses
  - 2001-2002 Post 9-11 recession
  - 2008- 2009 Great Recession
- Traditional long-term pension investment risk controls were overwhelmed by non-diversifiable risks
  - **Financial systemic risk (e.g., subprime crisis)**
  - **Political instability**
  - **Global security/terrorism**
- Most asset categories Global stocks, real estate, private equity and commodities did not hold value during the market downturn
  - Finding non-correlated assets was hard - exceptions were cash, government bonds and precious metals



# National Perspective: Why Public Pensions Costs Are Increasing

Source: Investment Company Institute



# National Perspective: Why Public Pensions Costs Are Increasing

- Delayed funding
- Cost volatility magnified by size of pension liabilities
  - Even moderate market losses are large compared to tax base
- Unfunded benefit improvements
- Excessive and pension benefit manipulations are not significant components of the problem



# National Perspective: The Result

- “Soft” pension debt is starting to act and feel like “hard” debt obligations
  - Can’t push the pain into the future anymore
- Pension contribution requirements are rising and competing with increasing and pent-up demand for:
  - Wages and health benefits
  - Medicaid
  - Infrastructure and transportation
  - Public education
  - Public safety and corrections



## National Perspective: DB Pension Finances – By the Numbers

- Before the late 2008 market downturn, the Public Fund Survey reported:

Survey Date (125 Plans)	Actuarial Funding Ratio	Actuarial Value of Assets	Actuarial Liabilities	Unfunded Liability
FY 2008	85.3%	\$2.58 trillion	\$3.02 trillion	\$.44 trillion

Source: The Public Fund Survey is an online compendium of key characteristics of public retirement systems. The survey is sponsored by the National Association of State Retirement Administrators and the National Council on Teacher Retirement - [www.publicfundsurvey.org](http://www.publicfundsurvey.org)



## National Perspective:

### Another View - After the Downturn

Novy-Marx, Rauh 2009 Study\*

- Examined the funding levels of 116 state pension plans at the end of 2008 and reported:
  - Accumulated Benefit Obligation = \$2.87 trillion
  - Market Value of Assets = \$1.94 trillion
  - Unfunded Liability = \$.93 trillion
- This “pension debt” is almost equal to state publicly traded debt of \$.94 trillion
  - \$46,500 per public plan participant

•The Liabilities and Risks of State-Sponsored Pension Plans, 2009 - Robert Novy-Marx is Assistant Professor of Finance, Booth School of Business, University of Chicago, Chicago, Illinois. Joshua D. Rauh is Associate Professor of Finance, Kellogg School of Management, Northwestern University, Evanston, Illinois. Novy-Marx and Rauh are also Faculty Research Fellows, National Bureau of Economic Research, Cambridge, Massachusetts.

Note: Liability and asset levels reported in the study may vary from those reported by the plans themselves because of report timing and projection methodologies



## National Perspective:

# What Does the Future Look Like?

Novy-Marx, Rauh 2009 Study\*

- Unfunded pension shortfall = \$.93 trillion
- 15-Year Projection of Pension Shortfalls under various market conditions:
  - 10<sup>th</sup> percentile outcome = \$3.8 trillion
  - 25<sup>th</sup> percentile outcome = \$3.4 trillion
  - 50<sup>th</sup> percentile outcome = \$2.8 trillion
- A “new normal” economy makes even the median (50<sup>th</sup> percentile) projection look optimistic

•The Liabilities and Risks of State-Sponsored Pension Plans, 2009 - Robert Novy-Marx is Assistant Professor of Finance, Booth School of Business, University of Chicago, Chicago, Illinois. Joshua D. Rauh is Associate Professor of Finance, Kellogg School of Management, Northwestern University, Evanston, Illinois. Novy-Marx and Rauh are also Faculty Research Fellows, National Bureau of Economic Research, Cambridge, Massachusetts.

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# National Perspective: Sustainability of Public Pensions

- Can public pension plans in their current form survive?
- How long will it take to fix?
- At what cost?



# National Perspective: Barriers to Solutions

- Super ERISA vesting rights
  - Unlike private sector plans, most public employers can only change benefits for new hires
- Stakeholder resistance
- Limited financial resources
  - Pension liabilities are large relative to tax revenue base



# What States Are Doing

- **Reducing benefits for new hires**
  - Georgia, Louisiana, Nevada, New Mexico, Rhode Island, Texas
- **Contribution increases**
  - Colorado, Nebraska, New Mexico, New Hampshire, Nevada, Oklahoma, Texas
- **Delayed funding**
  - Colorado, California, Kansas, Kentucky, Louisiana, New Jersey, Vermont, Washington
- **Pension obligation bonds**
  - Illinois
- **Legislative Studies**
  - Arkansas, Illinois, Indiana, Louisiana, Maine, Montana, New Mexico, Vermont
  - Defined contribution plans are being considered



Source: State Pensions and Retirement Legislation 2009, August 17, 2009, Ronald Snell – National Conference of State Legislatures

# Our Point of View

## Rethinking Public Pensions

- Develop a plan for funding past-service liabilities
  - Credit rating agencies want to see a plan - even if it isn't perfect
  - If possible, liabilities should be funded in no more than 30 years
- Reduce pension funding risks
  - Derisking and deleveraging will only be realized over the long-run
  - 10-20 years in some cases
- Act sooner than later
  - Delay compounds the problem
- Don't throw out the baby with the bath water!



# Options for Reducing Pension Funding Risks

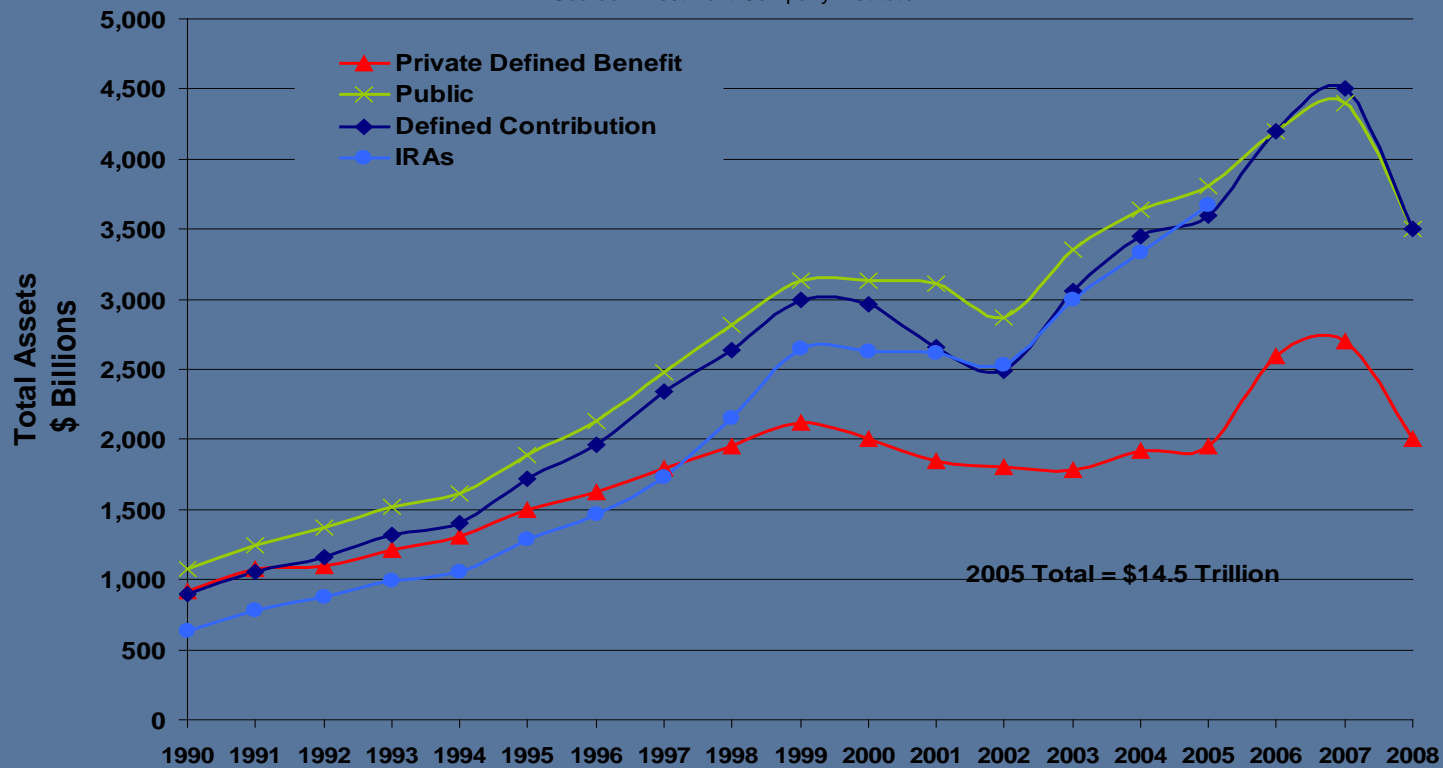
- Reduce DB promises for new hires
  - Helps control growth of future liabilities
- Refinance pension liabilities - Pension obligation bonds
  - Be careful, reinvesting the proceeds into the pension plan will have its own risks – it is like doubling down on a bet
- Explore immunizing current liabilities and new accruals
  - Shift funding risk to third party risk takers/insurers
- Consider a Risk-Managed Defined Contribution Pension Plan
  - For new hires; Option for current employees
  - Fills DB gap without placing unreasonable risks on employees



# Our Point of View

## Traditional 401(k) Style DC Plans Do Not Work

Source: Investment Company Institute



# Employers Still Need Retirement Objectives to be Met

**Workforce Objectives**



**The orderly and timely separation of older employees**

**Recruitment and retention of new employees**

**Managing revenues and costs**



# Employees also need retirement objectives to be met

**Employee Objectives**



**Adequate Retirement Benefits**

**Secure Retirement Benefits**

**Reasonable Costs**



# MANAGING RISKS IN DC PLANS



# MANAGING RISKS IN DC PLANS

## 1st Question: What is the purpose of the Plan?

### Step 1 Retirement Benefits Policy

- Retirement Income?
  - What is retirement income replacement objective?  
(Taking into account Core DB and Social Security)
- Wealth Accumulation?
- Combination?



# MANAGING RISKS IN DC PLANS



**Step 2  
Risk  
Assessment**

2nd Question: What risks need to be managed under the Plan?



# Standard DC Pension Risks

- Failure to participate
- Failure to vest
- Inadequate funding
- Inadequate investment return
- Inappropriate asset allocation
- Outliving retirement assets
- Inflation
- Retirement asset leakage
- Other Risks:
  - Death and disability
  - Excessive administration costs and fees



# DC Pension Risk Management: Best Practice Design

Plan Design Feature	Risk Management Best Practices	Risk Benefit
Eligibility and Participation	<ul style="list-style-type: none"> <li>▪ Mandatory enrollment/participation</li> <li>▪ No age restrictions</li> <li>▪ No more than 1-year waiting period</li> </ul>	Lowers risk of non-participation
Vesting of Employer Contributions	100% after 1-year	Lowers risk of forfeiture
Total Contributions (Employer and Employee)	At least 12% of pay if covered by Social Security;	Lowers risk of underfunding



# DC Pension Risk Management Best Practice Design

Plan Design Feature	Risk Management Best Practices	Risk Benefit
Investments	<ul style="list-style-type: none"><li>▪ Mandatory or default into lifecycle/target date or qualified managed account (QMA)</li><li>▪ Limited array of 15-20 participant directed investments covering the major asset classes</li><li>▪ Individual investment advice for participant directed investments</li><li>▪ Broad-based employee investment education</li></ul>	Lowers risk of poor investment decision making by participants



# DC Pension Risk Management: Best Practice Design

Plan Design Feature	Risk Management Best Practices	Risk Benefit
<b>Investments (Continued)</b>	<ul style="list-style-type: none"> <li>▪ <b>Collective investment trusts (CITs)</b></li> <li>▪ <b>Separate Accounts</b></li> </ul>	<ul style="list-style-type: none"> <li>▪ <b>Can help optimize selection of higher performing managers</b></li> <li>▪ <b>Can lower investment management fees</b></li> <li>▪ <b>Allows exposure to important asset classes to provide opportunities to improve risk/return (e.g., real estate, private equity, other alternative investments)</b></li> </ul>



# DC Pension Risk Management: Best Practice Design

Plan Design Feature	Risk Management Best Practices	Risk Benefit
Distributions	<ul style="list-style-type: none"> <li>▪ Limited or no hardship or loan features</li> <li>▪ Distributions limited to plan's retirement age               <ul style="list-style-type: none"> <li>- Except small benefit accumulations</li> </ul> </li> <li>▪ Some level of mandatory guaranteed life income annuity</li> <li>▪ Limited lump-sum distributions</li> <li>▪ Provide inflation protected options and features</li> </ul>	<p>Reduces risk of “retirement asset leakage” before retirement</p> <p>Reduces risk of the participant outliving their accrued DC benefit</p> <p>Helps maintain the participant's standard of living during retirement</p>





# Managing Non-Diversifiable Risk in DC Plans

Shift the risk to a third party pooled risk taker

- An insurance company



# The Role of Lifetime Income Protection Products

## During accumulation stage – multiple roles

- Fixed income asset class
- DB type component of an overall retirement strategy
  - Guaranteed retirement income stream\*
  - Can act to reduce annuitization rate risk
  - Can provide inflation protection – varies by type of product
  - Shifts investment risk to issuer
- Pre-retirement survivor benefit – J&S features

\* Guarantees are based on the claims-paying ability of the issuer.



# MANAGING RISKS IN DC PLANS

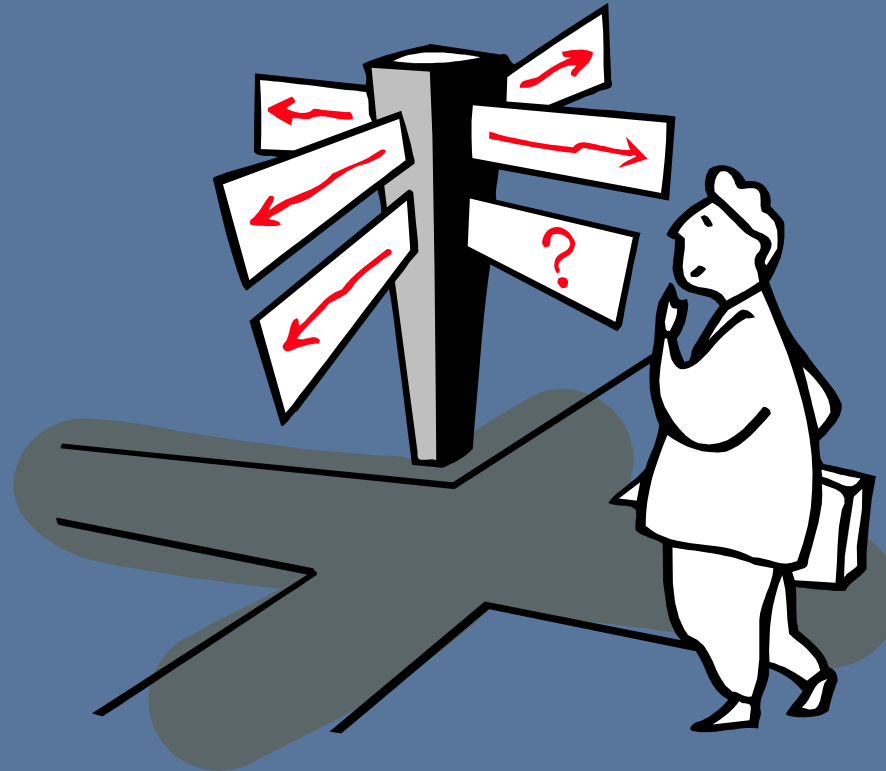


## A Final Word:

There is no such thing as a riskless retirement plan; it's all about how you manage those risks



# QUESTIONS?



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