



Economic Experience Study Overview

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"Securing tomorrow's pensions today."

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Today's Presentation

- Experience study 101
- Information on the assumptions we're studying
 - Interactions between the assumptions
 - Data we're looking at
- Understanding risk
- No action/decisions required today



What Is An Economic Experience Study?

- Review of current long-term economic assumptions
 - How do they compare with actual experience?
 - Do they need to change?
- Assumptions help us estimate
 - Value of future
 - Benefits
 - Contributions
 - Assets
 - Today's value
 - Future value



Why Do We Perform Them?

- Things change
- Ensure assumptions remain reasonable
 - Reasonable assumptions contribute to reasonable funding
- Important part of systematic actuarial funding
- Risk management



How Do We Perform Them?

- They're data driven
 - Over 75 years of experience in some cases
- They also involve professional judgment
 - Past not always the best predictor of future
 - An actuary performs the study and makes recommendations
 - An outside actuary can review recommendations for reasonableness



Setting Economic Assumptions

- Actuaries use professional judgment to estimate future economic outcomes based on past experience and future expectations
- An actuary's best estimate assumption is typically represented by a range
- Within the range the actuary selects a single point estimate for each assumption
- Entire set of economic assumptions should be consistent

future?



Economic Assumptions We're Studying

- Rate of investment return
- Rate of inflation
- Rate of general salary increases
- Growth in system membership (for amortizing the Plan 1 UAAL)
- All prescribed in statute

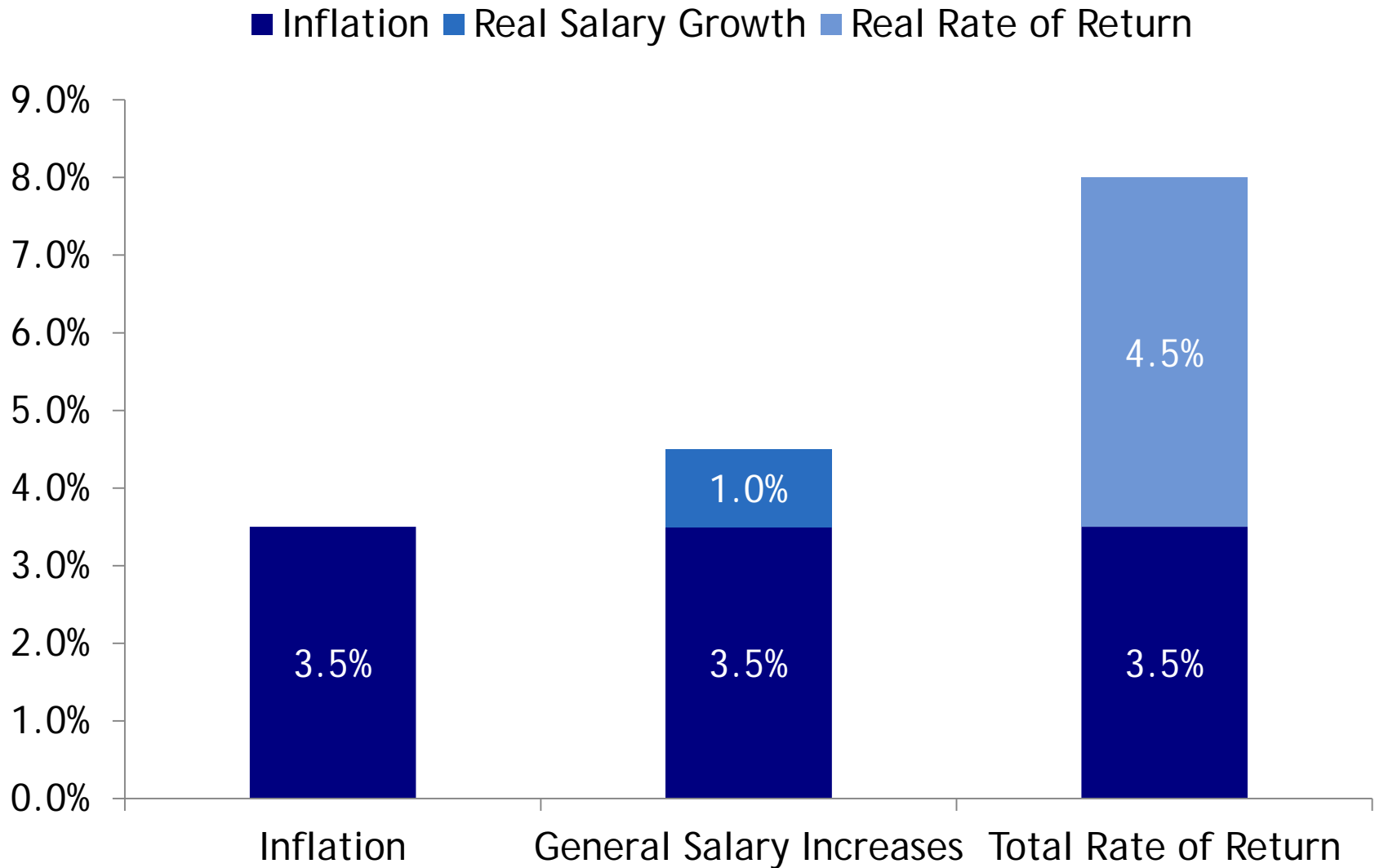


How The Assumptions Interact

- Building Block Method
- Start with inflation
- Inflation is a component of total investment return and general salary increase assumptions
- Helps ensure set of assumptions is consistent



Building Block Example – Current Assumptions



Rate Of Inflation

- General economic inflation, typically measured as price changes over the whole economy
- Used for projecting future salary and post-retirement COLAs



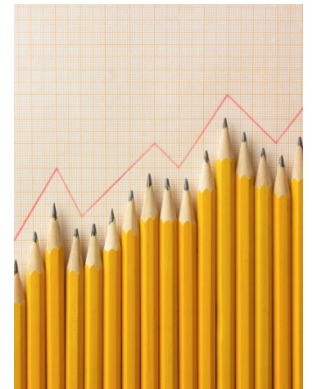
Rate Of Investment Return

- Reflects anticipated returns on plan's current and future assets
- Used to calculate "present value" of future benefits and salaries of current members



Rate Of Salary Growth

- Represents rate of change in an individual's salary
- Used to project future salary and contributions



Growth In System Membership

- Represents rate of change in number of active members covered under retirement system
- Not used for funding purposes in LEOFF 2
 - Used in projections
- Used under current PERS 1 and TRS 1 amortization methods



Data Sources By Assumption

- System/plan specific
- State/region specific
- National
- Historical
- Projected/Forecasted



Data Sources By Assumption

	Inflation	Interest	Salary Growth	System Growth
System/Plan			X	X
WSIB	X	X		
OFM			X	X
Social Security Administration	X	X	X	X
Bureau of Labor Statistics	X			
Congressional Budget Office	X		X	
Census Data				X
Wilshire Report		X		
GlobalInsight	X			





Understanding The Risk

- Assumptions involve uncertainty
 - But what's at stake if experience differs from the assumptions?
- Show the risk using risk measures
- Risk Measures
 - Funded Status drops below 80 percent
 - Member contribution rate goes above 9 percent
 - Board input - What's a bad outcome from your perspective?



What If You're Wrong?

- Natural consequences will follow
- Risk Measure - Funded Status drops below 80 percent
- Assumption - Rate of Return
- Prior Best Estimate Range - 6.75 percent to 9 percent



Example Of Risk Analysis

- Funding at 9 percent
 - Lower contribution rates
 - More losses than gains expected
 - Higher chance of Funded Status falling below 80 percent
- Funding at 6.75 percent
 - Higher contribution rates
 - More gains than losses expected
 - Lower chance of Funded Status falling below 80 percent



Being On The “Right Side” of the Risk

- Risk isn't symmetric
 - Conservative assumptions
 - Tip the scales in the “right” direction
 - Best estimate not necessarily in center of range
- Balance managing risk measures with other stakeholder interests
 - State and local budgets
 - Member take home pay
 - Benefit/plan security



Next Steps

- OSA recommended economic assumptions by September 1
- Pension Funding Council (PFC) may adopt changes to the economic assumptions by October 31
- LEOFF 2 Board may adopt changes at any time
- Past Board action coordinated with PFC





Questions?

