Police & Public Plans
Defending Defined Benefit

National Association of Police Organizations
28th National Pension & Benefits Seminar
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Your MassMutual Presentation Team

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4 Common Misconceptions
Misconception #1

Defined Benefit plans are more costly than Defined Contribution plans

Plan benefits come from three sources:
- Member Contributions
- Employer Contributions
- Earnings

This is true for both DB and DC plans. Therefore, a DC plan will only cost less if it can out earn a DB plan

Source of Benefits*

- Earnings: 61%
- Employer: 26%
- Member: 13%

* NASRA Issue Brief: Public Pension Plan Investment Return Assumptions, National Association of State Retirement Administrators, April 2014
**Misconception #1**

*Defined Benefit plans are more costly than Defined Contribution plans*

The National Institute for Retirement Security*

“A typical DB plan provides equivalent retirement benefit at about the half the cost of a DC Plan, and 29 percent lower cost than an “ideal” DC plan modeled with generous assumptions”

<table>
<thead>
<tr>
<th>Reason</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Longevity risk pooling</td>
<td>15</td>
</tr>
<tr>
<td>Balanced portfolio and diversification</td>
<td>5</td>
</tr>
<tr>
<td>Superior investment returns</td>
<td>26</td>
</tr>
</tbody>
</table>

Misconception #1

**Defined Benefit plans are more costly than Defined Contribution plans**

Returns compared from 1990-2012, averaged 0.70% greater for DB plans over DC plans\(^1\)

Pension plans often beat 401(k) plans. Since 1995, DB plans outperformed by 0.76% annually\(^2\)

“How to Dig an Even Deeper Pension Hole” reported that moving employees from DB to DC plans has failed in 3 states that have tried it and was rejected by 13 other states after research concluded that the change would hurt taxpayers and pension recipients\(^3\)

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\(^1\) *Investment Returns: Defined Benefit vs. Defined Contribution Plans*, Center for Retirement Research at Boston College, December 2015

\(^2\) *Pension Plans Beat 401(k) Savers Silly – Here’s Why*, Forbes, June 2013

\(^3\) *How to Dig an Even Deeper Pension Hole*, Keystone Research Center, October 2014
Misconception #2

*Public pension systems are grossly underfunded, liabilities significantly understated, and are unsustainable*

- There are many different ways to measure a pension plan’s liability. Some are appropriate for a public plan and others may not be.

- This means measuring based on an internal rate of return versus using external “shut down” measures.

- Recent studies by NASRA show that the median public pension annualized investment returns have averaged 9.0% over the last 25 years, and that the average return assumption is 7.72%.

- New accounting standard “endorses” internal rate for plans using long term trust funding.

- Using a rate that’s too low would overstate the liability and could lead to excess assets, meaning taxpayers could be overtaxed.

For funding purpose, we believe Police and other public plans should be measured on a long-term basis rather than the “shut down” basis that private plans are required to use.

*2014 Facts : State and Municipal Bankruptcy, National Association of State Retirement Administrators, 2014*
## Misconception #2

*Public pension systems are grossly underfunded, liabilities significantly understated, and are unsustainable*

### Internal Rate of Return vs. “Shut Down” basis

<table>
<thead>
<tr>
<th></th>
<th>7.50%</th>
<th>4.50%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Current Asset Value</td>
<td>$72,000,000</td>
<td>$72,000,000</td>
</tr>
<tr>
<td>Accrued Liability</td>
<td>$72,000,000</td>
<td>$100,000,000</td>
</tr>
<tr>
<td>Funded Status</td>
<td>100%</td>
<td>72%</td>
</tr>
<tr>
<td>Potential Over Funding*</td>
<td>$</td>
<td>0</td>
</tr>
</tbody>
</table>

*10 year amortization cost of the potential overstatement of the liability

Consider objective in defining perspective
Misconception #3

Police officers receive a very rich pension benefit

Average urban Police pension is about $46,400 per year*

- For Police Officers not covered by Social Security, the pension must make up for Social Security
- Typical Social Security benefit would be about $15,000
- Member funds 1/3rd of their benefit

<table>
<thead>
<tr>
<th>Source</th>
<th>Amount</th>
</tr>
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<tbody>
<tr>
<td>Employer funded</td>
<td>$30,900</td>
</tr>
<tr>
<td>Member funded</td>
<td>$15,500</td>
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</table>

Misconception #3

*Police officers receive a very rich pension benefit*

- Police Pension Plans operate as a controlled personnel management tool
- Police Pension Plans allow senior Police Officers to retire on their terms allowing for upward mobility for junior officers
Misconception #4

Public Pension Systems are a huge financial burden to communities

- DB pension plans act as an economic stabilizer - retirees with steady pension are willing to spend at local businesses – generating income and tax revenue

- Pension plans generate economic activity – a $1 in pension has been estimated to generate $1.98 in economic activity*

- Public pension plans are transparent under GASB accounting

- Studies show that pensions inure tangible economic benefits

- Amount of overall budget is not significant (under 3%)

Pension Reform and Design Best Practices
What is “Pension Reform”

• There has been a strong movement of late to change state and/or local laws to allow for alternatives to traditional Defined Benefit plans for providing retirement benefits.

• In the past, changes in a pension design such as these focused on future hires rather than current members.

• More and more, we are seeing these movements also targeting some (or all) of the current members.

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**Illinois Pension Reform**

*In Pension Battle, Governor Faces Constitutional Fight*

 Reuters  |  Posted 05.11.2015  |  Politics


By Karen Pierog CHICAGO, May 10 (Reuters) - Illinois Governor Bruce Rauner faces a formidable challenge in his bid to reform public.

Read Whole Story
In a step toward meaningful pension reform, Oklahoma Gov. Mary Fallin signed legislation that ends the state’s traditional pension retirement system for newly hired state employees in favor of a 401(k)-style retirement plan. Teachers and state workers designated “hazardous duty” including firefighters and law enforcement officers are exempt. And the legislation does not change the...
• Many of the movements, like in Oklahoma, have been pushing for a Defined Contribution (DC) or 401(k) approach to replace the Defined Benefit (DB) approach

• Comparing the two types can be complicated

• Under a Defined Benefit Plan

  Defined Employee Benefit → Plan Experience → Resulting Employer Contribution

• Under a Defined Contribution Plan

  Defined Employer Contribution → Plan Experience → Resulting Employee Benefit
Key Features of Defined Benefit (DB) Plans

**Characteristics**
- Single career focus
- Less portable
- Pooled assets
- Employer-managed assets
- Security focus
- Benefits older employees

**Costs**
- Can be more cost effective because of lower payouts to younger non-retirees
- Fixed obligation, not related to performance
- Unfunded liabilities
- Can be volatile

**Predictable retirement income**
- Design flexibility (early retirement subsidies, past service benefits, COLA, etc.)

**Often, low employee understanding and appreciation**
- Actuarial valuations and financial reporting
Key Features of Defined Contribution (DC) Plans

Characteristics
- Multiple career focus
- Portable
- Member bears investment risk
- Member usually makes certain asset choices
- Value focus
- Benefits younger employees more than Defined Benefit plan

Costs
- Can be less cost efficient because of higher payouts to younger terminations
- Fully funded
- Can be made flexible or fixed
- Predictable
Pension Reform – A Case Study

- Following is a sample case study where we illustrate some of the potential “pitfalls” when comparing the two retirement delivery approaches
- This analysis was based on a state police Defined Benefit Plan
- The current plan provides a lifetime income of 70% Final Pay for anyone with 30 or more years of service
- Final Pay is final 12 months
- There is no post retirement cost of living increases on the 70%
- Members contribute 7.5% of their pay each year

Please note that in presenting this case study MassMutual is not advocating that Defined Benefit plans provide better benefits than Defined Contribution plans. We believe that either, when well-designed and well-managed, can produce favorable retirement results. We also believe that it’s important for Plan Sponsors and Participants to be provided with the data and analysis needed to be informed decision makers about their retirement program and benefits.

The following analysis is for this specific plan and therefore results could differ depending on the actual plan and costs being analyzed.
The current recommended contribution as a % of payroll is:

- Cost for unfunded past benefits 14.9%
- Cost for current year’s benefits (new) 9.9%
- Cost for death and disability benefits (ancillary) 2.4%
- Contribution from members for current benefits 7.5%
- Total recommended contributions 34.7%

Assumed annual earnings (before and after retirement) on the pension trust assets 7.90%
The two bar graphs show the percentage of pre-retirement income expected to be replaced by each type of plan. For the DB plan it’s 70% by the design of the plan. For the DC plan it’s an estimate of the lifetime annuity that could be generated through a member’s entire retirement by the accumulated account balance (based on the assumptions used).

The comparison above is based on the entire 34.7% funded into the DC and the same 7.90% earnings before and during retirement*

* Hypothetical example, for illustrative purposes only. Not intended to reflect the actual performance of any specific investment. Individual experience will vary.
The comparison above removes the 14.9% funding for past liabilities from the DC, same 7.90% earnings before and during retirement*

* Hypothetical example, for illustrative purposes only. Not intended to reflect the actual performance of any specific investment. Individual experience will vary.
Remove “Insurance” Cost For Death & Disability

This comparison also removes the 2.4% for active death and disability, same 7.90% earnings before and during retirement*

* Hypothetical example, for illustrative purposes only. Not intended to reflect the actual performance of any specific investment. Individual experience will vary.
Adjust for Individual Earnings Expectations

Same combined (employer and member) contribution of 17.4%, but with 7.20% earnings before and during retirement*

* Hypothetical example, for illustrative purposes only. Not intended to reflect the actual performance of any specific investment. Individual experience will vary.
Same combined contribution of 17.4%, but with 7.20% earnings before and full longevity protection during retirement*

* Hypothetical example, for illustrative purposes only. Not intended to reflect the actual performance of any specific investment. Individual experience will vary.
*Summary of slides 20-24

- All Funding
- Remove Cost for Past Benefits
- Remove Cost for Ancillary Benefits
- Adjust Earnings Rate
- Adjust for Longevity

Cost for Past Benefits
Cost for Ancillary Benefits
Member Contribution
Cost for New Benefits
The state provides data summaries for municipal Defined Benefit plans

Of 490 independent municipal plans, 187 cover Police

Of those 187 plans, 92 cover employees not covered by Social Security

Total assets $12.8 Billion

Total Liabilities $17.9 Billion
The data shows a variety of funding levels, asset returns, and sizes

**Average Funded Ratio 81%**
- Median funded ratio is 79%
- Shows that the state has as many well-funded plans as poorly funded ones
- 53 plans have a ratio higher than 90%

**Average return on assets 12.4%**
- Plans with funded ratio greater than 90% have an average return of 11.6%
- Some correlation with funded ratio, but not completely

**Average participant count 257**
- Median participant count is 77
- 17 Police Plans with 500 or more participants bring up the average
- Size of plan has no bearing on how well funded
Average annual return for 2014 is 12.4%*

*Department of Management Services' Division of Retirement 2015 Actuarial Summary Fact Sheets
Average Funded Ratio for 2014 is 81%*

*Department of Management Services’ Division of Retirement 2015 Actuarial Summary Fact Sheets
New Accounting Requirements
New GASB reporting rules

• GASB 67 Plan Accounting
  • Effective for FYs beginning after 6/15/2013 (replaces GASB 25)

• GASB 68 Sponsor Accounting
  • Effective for FYs beginning after 6/15/2014 (replaces GASB 27)

• At the heart of the new accounting rules is a separation of funding and accounting.

• Under the previous Standards an Annual Required Contribution (ARC) was calculated and many sponsors adopted this as a funding standard
New GASB reporting rules

• Plans/sponsors were not required to contribute the ARC but there was an incentive to do so as any shortfall or excess contribution was accumulated and appeared in the notes to the financial statements.

• Under the new rules there is no ARC. This provides an opportunity to revisit and enhance understanding of what it means to fund defined benefit plans. The funding policy decisions remain with plan sponsors, retirement board systems, and legislative bodies.

• Under the new GASB rules there is a balance sheet liability and an income statement expense.
  • The balance sheet liability is the difference between the value of benefits and the value of assets.
New GASB reporting rules

- Discount Rate to Measure Liability = combination of expected Return on Assets & municipal bond rate
  - Previously the GASB 25/27 rate was based on the Expected Return on Assets
  - The lower the rate the higher the liability & expense

Using low rates for measuring liabilities results in high liabilities
New GASB reporting rules impact on funding

- Under GASB 67/68 the rate is the EROA only to the extent all future benefits are expected to be paid from invested assets
  - Those benefits that won’t are discounted using a rate based on 20-year tax-exempt general obligation municipal bond
  - This “blended rate” will almost certainly be lower than the EROA and so result in higher accounting liabilities and accounting costs

<table>
<thead>
<tr>
<th>Sample plan’s GASB liability</th>
<th>Using expected return on assets</th>
<th>Using a blended rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>$62M</td>
<td>$90M</td>
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</tbody>
</table>

Whether or not all future benefits can be expected to be paid from invested assets will depend on the current funding and investment policies

To avoid having to use a blended rate under GASB 67/68 it may be necessary to revisit and strengthen investment and funding policies